



Local Implementation Plan

2011/12 – 2013/14



Produced by
Strategic Planning and Transportation Services Division
London Borough of Bexley

Co-ordinated by
Richard Hawkins
Former Head of Transport & Traffic Services Division

Consultants:



Local Implementation Plan

2011/12 - 2013/14

Achieving Bexley's potential through transport investment

June 2011



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Foreword

I am pleased to introduce the second Local Implementation Plan (LIP) of the London Borough of Bexley.

This is a statutory document that shows how Bexley will contribute towards the implementation of the Mayor of London's Transport Strategy (MTS). We published our first LIP five years ago but we now have a new Mayor's Transport Strategy (published in May 2010) and this LIP demonstrates our commitment to deliver the new strategy.

The structure of this document follows the format prescribed by Transport for London (TfL) in its statutory role and the reconciliation of high-level policies from the MTS with objectives derived from local transport issues has been a challenge. Our officers and consultants were able to work in close association with TfL officers to produce a professional document that promotes the transport improvements both London and Bexley need.

Bexley's approach to transport planning and policy development has always been led by wider strategic considerations and local needs and aspirations. In accordance with TfL's guidance, this LIP is specifically objective-led. In the light of the MTS goals, the challenges and opportunities of the East Sub-Region and the Borough's own vision and circumstances, we have identified ten objectives that have influenced the LIP proposals and delivery actions.

Bexley's position at the heart of the growth area of the East London Sub-region, its pockets of deprivation and significant regeneration potential provide both a challenge and an opportunity. Transport has an important role to play in helping the Borough achieve its potential.

As transport is a function of land use, we have taken account of the emerging Core Strategy of the Council's Local Development Framework, the Replacement Draft of the London Plan, in addition to the MTS. Whilst the recently published Sub-Regional Transport Plan (East) has provided an important context, we are disappointed by the absence in that document of any proposal for major transport infrastructure for the Borough.

We have welcomed the Mayor of London's decision to rationalise the process of LIP funding allocation that allows boroughs more flexibility to use the allocated funds under broad programme areas. Bexley has also secured support for major schemes for transport and public realm improvement in its town centres. The Delivery Plan and the Programme of Investment in this document reflect this position.

The nation's current economic climate inevitably has an impact on the funding of transport infrastructure. Although we believe that the provision of high-quality public transport facilities for the Borough is a high priority, we appreciate that this will remain an important aspiration for the longer-term. Mindful of the funding constraints, we have selected our priorities carefully.

We have consulted widely on the draft documents and I would like to thank all individuals, interested organisations and particularly, the Transport for London Team for their response to the consultation of the Draft LIP and I look forward to the successful implementation of this plan.



Councillor Peter Craske

Cabinet Member for Public Realm and Community Safety





Executive Summary

Executive Summary

1. Introduction

This document presents the London Borough of Bexley's Second Local Implementation Plan (LIP) including the transport proposals for the period 2011/12 to 2013/14. The LIP is a statutory document required to be prepared by each London borough by the Greater London Authority Act 1999 to implement the Transport Strategy of the Mayor of London (MTS) in its area. The new MTS was published in May 2010.

In accordance with the LIP Guidance issued by the Greater London Authority, the Second LIP document is divided into three parts: first, Borough context and transport objectives; second, a delivery plan; and third, a performance monitoring plan, that also includes the results of the consultation on the Draft LIP published in December 2010. This is appended by an Equality Impact Assessment and a Strategic Environmental Assessment of the LIP proposals.

The Consultation Draft LIP was approved by the Council's Cabinet on 14 December 2010. On submission of the document to Transport for London (TfL) on 20 December, consultation was undertaken with the statutory stakeholders as well as the representatives of the Borough's businesses and residents during January 2011 to March 2011. The feedback from the consultation, in particular, the comments from TfL has been carefully considered in finalising the current document, which was endorsed by the Council's Public Cabinet on 21 June 2011.

2. The land-use and socio-economic context

Bexley is an outer London borough situated at the heart of the Thames Gateway region in South-east London. Land use in the Borough is predominantly residential but the Council also has large areas of open space and several large areas of industrial activity. Bexley has four major district centres – Crayford, Erith, Sidcup and Welling – and one strategic town centre, Bexleyheath in the middle of the Borough.

After remaining static for many years, the Borough's population is showing a slightly rising trend. According to the Office of National Statistics (ONS), Bexley's mid 2008 population is estimated to be 223,000. The GLA (2009) projection shows a population increase in Bexley from 2016 to around 227,500 by 2031. The biggest increase in numbers is expected for those aged 25 to 44 and the change in numbers is expected to vary across the borough.

Unemployment for the borough as a whole is generally low (3.4% compared to the London average of 4.5%), but there are small pockets within the Borough where the numbers are significantly higher.

In the Mayor of London's new sub-regional structure, Bexley is placed in the East Sub-region which is stated to have one of the greatest challenges of all the London Sub-regions – to accommodate significant levels of new housing and jobs while enhancing existing neighbourhoods and creating new mixed communities.

The East Sub-region is expected to experience the highest rate of growth in London and Bexley is in a good position to deliver its share of that growth. Belvedere and Erith are important industrial locations, which have successfully attracted new uses and activities, particularly in specialist distribution. Bexley Riverside (relating to parts of Erith, Crayford, Slade Green and Belvedere), Thamesmead and Abbey Wood are included amongst the 33 Opportunity Areas identified in the draft replacement London Plan (October 2009).

In preparing the LIP, due regard has been made of the Borough's Sustainable Community Strategy and Local Economic Assessment and other corporate policies. In view of the need for an integrated approach in land-use and transport planning, it has also been important to take into close consideration the Proposed Submission Document of the Core Strategy of the LDF that was published in November 2010.

3. Local transport context

Bexley has the second largest (60%) car ownership in London. This, in conjunction with the relatively inadequate provision of high-quality public transport facilities have resulted in a high proportion of trips by car and motorcycle – 60% of total trips by all modes, compared to 42% in East Sub-Region and 41% in Greater London. However, trip rates (2.1 per person per day) are particularly low in this borough, compared to both the East London Sub-region and the London average.

As transport provides a vital means of access to employment, leisure and a range of goods and services, the Council is seeking better transport links across the Borough and with neighbouring areas, particularly to reduce social exclusion.

There is a total of 519 km of public highway in the Borough including 9.8km of former trunk roads for which the Mayor is now responsible, and another 62 km of the most important borough roads which are classified as principal ('A' class) roads. The Council is responsible for traffic and transportation matters relating to all roads in the Borough with the exception of the Transport for London Road Network (TLRN)



roads A2 and A20 for which Transport for London (TfL) is the Highway and Traffic Authority. The Borough has the second largest Principal Road Network in London. Although it is ranked 7th amongst all London boroughs in reducing the length of highway needing repair over time, substantial continued investment will be required to maintain their overall condition.

Some main traffic routes pass through town centres, residential and conservation areas, resulting in problems of congestion and environmental damage. Particular problems exist in Bexley Village and Crayford Town Centre where London distributor roads, forming part of the Strategic Road Network (SRN) pass through the main shopping areas and conservation areas. Traffic flows in the Borough rose by 18% between 1998 and 2004, but declined by 3% over the next four years.

Public transport accessibility levels (PTAL) in Bexley are relatively low. No part of the Borough is connected to the London Underground network. Three east-west railway lines providing services, operated by Southeastern Railway, between Dartford and Central London, serve the Borough; there are no north-south lines. Many stations are not close to the main town centres and commercial area and only 40% of residents live within 800 metres of a rail station.

The bus is the main mode of public transport within the Borough. However, bus routes run in a broadly east-west direction and north-south connection across the Borough is poor often requiring a change of bus. Bexleyheath acts as a hub for services to the rest of the Borough.

Of the major planned transport infrastructure in the East Sub-region, Crossrail is the only significant proposal that will serve Bexley and is planned to terminate at Abbey Wood at the Borough's border with Greenwich. Contrary to expectations, DLR extension to Bexley is no longer in TfL's list of future projects and a provision of additional travel opportunities for Bexley's residents by Thameslink also appears uncertain. An Integrated Transport Study for Bexley prepared by consultants identified that a step change in demand for public transport and commensurate reduction in traffic volumes and delay experienced in the Borough could be delivered by means of significant measures such as a direct link to the London Underground network.

3. Transport Objectives

The London Borough of Bexley's approach to transport planning and policy development is firmly based on a wider strategic context as well as local needs and characteristics. The Mayor of London's Transport Strategy (MTS2) and the Sub-regional Transport Plan (East) provide the key regional policy influence. Within this framework, the Council's transport policies focus on investing in public transport, walking and cycling to make these modes more attractive and to reduce the reliance on the private car. Bexley's transport objectives are integrated with the Council's land use planning policies and an investment plan that aim to assist regeneration and encourage development to promote social inclusion.

Bexley's LIP has ten primary transport objectives:

1. Work towards an improved transport systems that support regeneration and economic development in the Borough;
2. Support growth needs in the Borough's spatial development strategy;
3. Secure a more comprehensive, high-quality and integrated public transport system to overcome the current constraints;
4. Maximise benefits of regional transport developments to fully utilise funded investment for improving the Borough's connectivity;
5. Optimise the efficiency of the existing transport networks and improve and maintain the existing transport infrastructure;
6. Support residents, visitors and businesses in choosing sustainable modes of travel to reduce the use of the car and traffic congestion leading to a better environment;
7. Promote the safety and security of road and transport users;
8. Improve and enhance access to jobs, services, health & leisure facilities;
9. Make transport system accessible to all with a view to improving social inclusion;
10. Reduce the Borough's carbon footprint from transport to address the issue of climate change.

These have been developed by addressing:

- the six goals and associated challenges of the Mayor's Transport Strategy;
- the challenges and opportunities identified in the Sub-regional Transport Plan (East); and
- the Council's Sustainable Community Strategy

The following table shows the relationships between Bexley's local transport goals, challenges and outcomes.

Bexley's Transport Goals, Challenges and Outcomes

Goals	Challenges/Objectives	Outcomes
Support economic regeneration and development pressures	<ul style="list-style-type: none"> ■ Work towards an improved transport systems that support regeneration and economic development in the Borough ■ Support growth needs in the Borough's spatial development strategy 	<ul style="list-style-type: none"> ■ Encouraging vibrant and viable town centres ■ Providing better accessibility in the deprived north of the Borough
Improve and enhance better connections to London and the wider region	<ul style="list-style-type: none"> ■ Secure a more comprehensive, high-quality and integrated public transport system ■ Maximise benefits of regional transport developments 	<ul style="list-style-type: none"> ■ Securing the Borough's connection to the London Underground network
Develop efficient and sustainable transport links within the Borough	<ul style="list-style-type: none"> ■ Optimise the efficiency of the existing transport networks and improve and maintain the existing transport infrastructure ■ Support residents, visitors and businesses in choosing sustainable modes of travel 	<ul style="list-style-type: none"> ■ Improving north-south links in the Borough ■ Improving cycling and walking facilities ■ Developing area-based and workplace travel plans ■ Increasing sustainable travel capacity and opportunities for trips to/ from key growth and employment centres within the borough
Develop a safer and secure transport system	<ul style="list-style-type: none"> ■ Promote the safety and security of road and transport users 	<ul style="list-style-type: none"> ■ Reducing road traffic collisions ■ Securing public realm improvements in town centres
Improve accessibility and social inclusion for all in the Borough	<ul style="list-style-type: none"> ■ Improve and enhance access to jobs, services, health & leisure facilities ■ Make transport system accessible to all 	
Reduce the Borough's contribution to climate change	<ul style="list-style-type: none"> ■ Reduce the Borough's carbon footprint from transport 	<ul style="list-style-type: none"> ■ Improving cycling and walking facilities ■ Encouraging more alternative fuel vehicles in service ■ Installing electric vehicle charging points ■ Encouraging more public transport usage ■ Reducing the need for travel
Improve the quality of life of all Borough residents	<ul style="list-style-type: none"> ■ Improve and enhance access to jobs, services, health & leisure facilities ■ Make transport system accessible to all ■ Reduce the Borough's carbon footprint from transport 	

4. Delivery Plan

A key element of the LIP is a costed and funded Delivery Plan of interventions for the three-year period 2011/12 to 2013/14. It provides (i) a programme of investment for a three-year work programme indicating a high-level breakdown of proposed spend, together with (ii) potential interventions in terms of individual schemes that in turn will address the objectives identified earlier.

The overall programme of investment for the three years amounts to a total of over £14 million.

Of this, confirmed developers' contributions and Council revenue expenditure account for only about 8% as land values in Bexley are some of the lowest in London and so the potential for contributions to transport improvements is limited. However, the Borough is seeking to increase this contribution and has a levy system in place that has transport as one of its highest priorities.

This investment spread under the broad categories of transport programme is as follows:

Transport Programme	2011/12 £000	2012/13 £000	2013/14 £000	Total £000
Corridors, Neighbourhoods and Smarter Travel	2,639	2,410	1,726	6,775
Maintenance	1,158	1,552	1,552	4,262
Major Schemes	270	3,150	0	3,320
Total	4,067	7,112	3,278	17,635

In order to ensure that potential risks are identified throughout the lifecycle of this LIP, Bexley's approach is to:

- Adopt a robust prioritisation process taking into consideration the Council's transport and corporate objectives, as well as the MTS goals;
- Identify risks, opportunities and uncertainties to assist decision making;
- Identify suitable mitigating measures in the event of slippage;
- Provide on-going review and reporting.

5. Performance Monitoring Plan

This plan identifies a number of targets and indicators, explaining how these targets have been developed with a view to ensuring delivery of outcomes set out in the MTS at a borough level. This will also form the basis of the annual LIP performance and progress reports.

TfL has indicated mandatory indicators relating to five core targets, namely, mode share, bus service reliability, asset condition, road traffic casualties and CO₂ emissions. Boroughs are required to set locally specific targets – for both 2013/14 and the longer term - in respect to each of these.

In developing the Borough's LIP targets, the following issues have been given careful consideration:

- a realistic balance between aspirations and the practicalities of achieving the targets, particularly in light of available LIP funding levels;
- the delivery of the transport programmes and schemes identified in the programme of investment;
- perceived constraints in achieving the targets including particular local circumstances.

The schedule of Bexley's performance indicators and targets and a summary of the Borough's Performance Plan are shown below:

Description	Proposed target	MTS Goals
1. Mode Share <ul style="list-style-type: none"> Walking Cycling School journeys 	Increase the percentage of journeys by foot to 28.5% by 2025/26 - Achieve a 3.0% modal share by 2031 (long term target) - Target trajectory 1.4% by 2014 (short term target) - Increase shift away from cars each year	2, 4, 5
2. Bus Service Reliability	- Maintain EWT to not exceeding 1.1 minutes till 2017/18 - Increase passengers	1, 2
3. Asset condition	Keep the percentage of Principal Road length in need of repair below 6% over the period 2010/11 – 2017/18.	1, 2
4. Road casualty reduction	- KSI: 9% below the 2007 to 2009 baseline by 2013; 30% by 2020 (long-term target) - All categories: 6% below the 2007 to 2009 baseline by 2013; 20% by 2020 (long-term target)	3
5. CO₂ Emissions	16% reduction in CO ₂ emissions by 2014 from the baseline in 2008.	3, 5

6. Impact Assessments

The London Borough of Bexley recognises the need to develop an inclusive transport system that takes account of the needs of all sections of the Borough's resident and visitor communities. Bexley's Strategic Planning and Transportation Division contributes fully to corporate initiatives to ensure Council services and employment practices take into account the protected characteristics set out in the Equality Act 2010. As an integral part of the LIP, an Equality Impact Assessment (EQIA) has therefore been conducted.

Bexley's LIP objectives include a specific reference to the transport needs of the Equality Target Group (ETG). The consultation carried out on the Draft LIP is also expected to provide some feedback from all sections of the community including the ETG. A screening form on impact assessment issued by TfL has been completed. The impact analysis clearly demonstrates that all the LIP objectives and the vast majority of measures have positive impacts for all groups. While some schemes have neutral impacts to some members of the ETG, no serious negative impacts resulting from the LIP policies and proposals have been discerned.

An independent Strategic Environmental Assessment of the LIP has been carried out by specialist external consultants. The London Borough of Bexley's LIP has few significant adverse effects due to the nature of the LIP, which is constrained by the requirements of the Council, the Mayor of London's Transport Strategy and the responsibilities of other bodies for large scale infrastructure works. Bexley Council Members have also been consulted prior to the development of the LIP about the strategic direction they wished transport policies to take. These influences on the LIP mean that the LIP policy options will generally produce or actively seek to bring about environmental improvement.

No significant changes have been required to be made to Bexley's programmes and proposals in the LIP due to the findings of the SEA. However, the SEA process has been helpful in considering the programmes and proposals in the LIP from a wider environmental perspective. It has resulted in additional focus and detailed evaluation of the Borough's policies.



Introduction

Introduction

Scope of the Document

This document presents the London Borough of Bexley's second Local Implementation Plan (LIP) for the period: 2011/12 to 2013/14. In accordance with the LIP Guidance issued by Transport for London (TfL), the new LIP will cover the period of the revised Transport Strategy of the Mayor of London published in May 2010. The document includes a three-year costed and funded Delivery Plan of interventions covering the period from April 2011 to 2013/14. The application of the first LIP prepared in 2006 expires on 31 March 2011.

The LIP is a statutory document required to be prepared by each London borough by the Greater London Authority Act 1999 which sets out the obligations of the individual boroughs to implement the Transport Strategy of the Mayor of London. In accordance with section 145 (1) of this Act, "as soon as reasonably practicable after the Mayor has published the transport strategy . . . , each London Borough Council shall prepare a plan (a 'Local Implementation Plan') containing its proposals for the implementation of the transport strategy in its area". The LIP is thus intended to be a statement by a borough of its proposals together with a timetable for implementing such proposals and an end date by which all proposals are to be implemented. It will reflect the Transport Strategy's objectives, policies and priorities, while taking account of the local context. According to Section 148 (1) of the GLA Act, "a London borough council may at any time prepare such revisions as it considers appropriate to the council's local implementation plan".

Report Structure

The structure and contents of this document follow the Guidance on Developing the Second Local Implementation Plans produced by TfL as well as the standard format recommended in TfL's Example LIP of November 2009. This requires the boroughs to include the following components in their LIPs:

1. An evidence-based identification of Borough Transport Objectives, covering the period 2011 to 2014 and beyond, reflecting the timeframe of the MTS;
2. A costed and funded Delivery Plan of 'interventions', including a programme of investment covering the period 2011 to 2014, or longer for Major Schemes and consistent with boroughs' three-year funding allocations announced in 2010;
3. A Performance Monitoring Plan, identifying a set of locally specific targets that can be used to assess whether the LIP is delivering its objectives and to determine the effectiveness of the Delivery Plan.

Thus, the initial two chapters present an analysis of the borough context – socio-economic, demographic and local transport – including the problems, issues and opportunities facing Bexley. Chapter 3 sets out the Council's corporate vision and transport objectives in support of the Borough's Local Development Framework, the Sustainable Community Strategy and other corporate policies as well as the Mayor of London's Transport Strategy (MTS). This also refers to the national and sub-regional policy frameworks, in particular the Sub-Regional Transport Plan for the East, and the essential linkages.

Chapter 4 presents the Delivery Plan followed by Chapters 5 and 6 dealing with the Performance Monitoring Plan and Consultation respectively.

In accordance with the European Union Directive 2001/42/EC, a Strategic Environmental Assessment of the LIP is required. As the SEA is an iterative process, this exercise has been carried out by independent specialist consultants alongside, and is integrated with the development of the LIP. This means that due consideration of the significant environmental effects of the policies and proposals contained in Bexley's LIP has been made. A summary of the Environmental Report is given in Appendix 2 and the consultants' full report will be submitted as a separate document.

Appendices 1 and 2 contain the Equality Impact Assessment of the LIP, and a Strategic Environmental Assessment Statement respectively. Two further Appendices contain the Abbreviations and Glossary.

Consultation Draft LIP

Under Section 145(2) of the GLA Act 1999, in preparing the LIP, boroughs are required to undertake a prescribed consultation exercise. Accordingly, on submission of the Consultation Draft LIP to TfL on 20 December, the London Borough of Bexley carried out a consultation exercise with all statutory stakeholders for a period of nine weeks. The feedback from this consultation, in particular, the comments received from TfL, have been taken into full consideration in finalising the Council's LIP.



Public
Footpath



Borough Context and Transport Objectives

Chapter I The Land-use and Socio-economic Context

Land-use and development patterns

1.1 Bexley is an outer London borough situated at the heart of the Thames Gateway region in South-east London and covers an area of about 64 square kilometres or 6,400 hectares. Its location in relation to other London boroughs is shown in Figure 1.1. Bexley's position in South-east London, close to the M25, makes it a gateway to the channel ports of Dover, Folkestone and Ramsgate and the Channel Tunnel via the A2 and A20. At the same time, the Borough serves as a gateway to London from Channel ports, as the vast majority of road-borne visitors from continental Europe to London travel through Bexley. There is also a relatively quick access to the Dartford River Crossings and to Stansted, Gatwick, Heathrow and City Airports. The Channel Tunnel and High-Speed 1 station at Ebbsfleet is just a few miles away. The nearest Thames River crossings currently are the Dartford Crossings and the Woolwich Ferry.

1.2 Land use in the Borough is predominantly residential but the Council also has large areas of open space and several large areas of industrial activity. There is less office development compared to most of London. The Borough has a five-mile frontage

onto the River Thames in the north, which includes the Belvedere Employment Area, one of the largest concentrations of industrial activity in London. Bexley is one of the greenest boroughs in London, with over 100 parks and open spaces covering 638 hectares

1.3 The Borough is made up of five clusters of wards working directly with Police Safer Neighbourhood Teams. Each ward is known as a Community Safety Action Zone (CSAZ). There are a total of 21 wards.

1.4 Bexley has four major district centres - Crayford, Erith, Sidcup and Welling – and one strategic town centre, Bexleyheath in the middle of the Borough. Bexleyheath has experienced a major expansion in the recent past resisting the challenge of Bluewater, and is considered one of the major town centres in London. Over the last ten years or so, the Council has been undertaking initiatives to improve the accessibility and environment of town centres. It is seeking to ensure that the full growth potential of the town centres is optimised and all development is achieved in a sustainable fashion. More recently, work has been undertaken to prepare a comprehensive major scheme for the continued revitalisation of Bexleyheath town centre.

Fig 1.1: Location of Bexley within Greater London

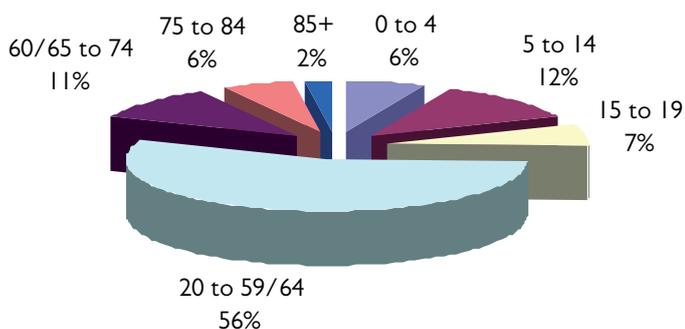


1.5 In addition to the Belvedere Employment Area, there are eight Primary Employment Areas not all of which are located in town centres. These are the Council's preferred locations for major new investment in industry and commerce, involving light industry, manufacturing, warehousing and distribution with a wide range of unit sizes, to meet the needs of small, medium and large firms.

Population and socio-economic features

1.6 After remaining static for many years, the Borough's population is showing a slightly rising trend. In 1998, Bexley had a population of 217,840. This increased to just over 218,756 in 2001, a marginal growth of 0.5%. According to the Office of National Statistics (ONS), Bexley's mid 2008 population is estimated to be 223,000 and a breakdown by age group is shown in figure 1.2 below.

Figure 1.2: Age breakdown of the Borough's population (ONS, mid 2008)

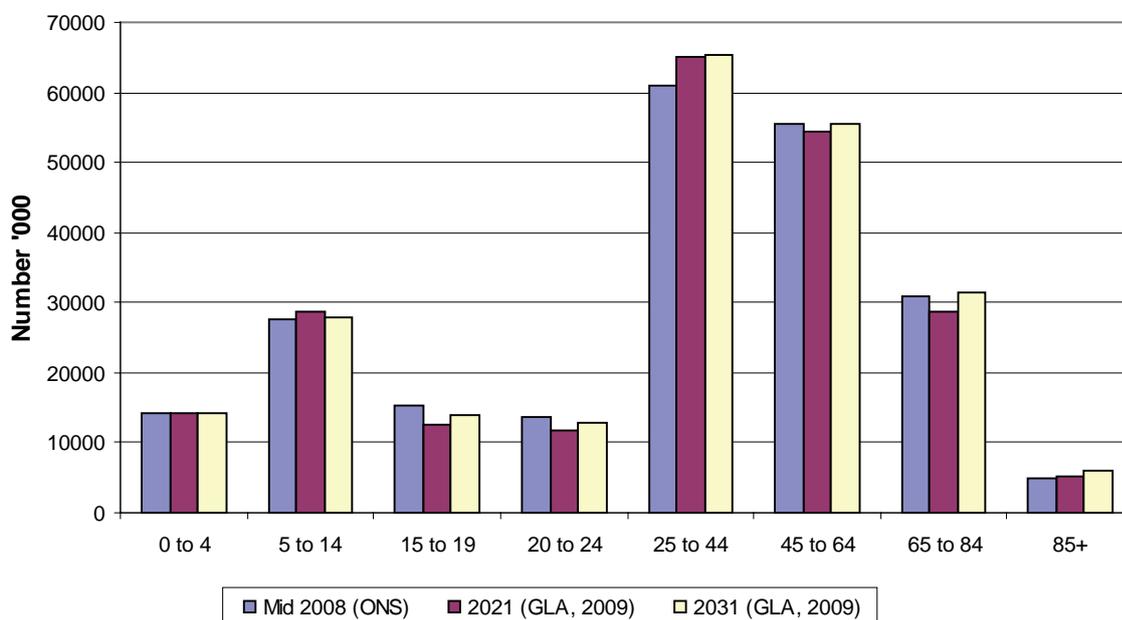


1.7 The GLA (2009) projection shows a population increase in Bexley from 2016 to around 227,500 by 2031. The biggest increase in numbers is expected for those aged 25 to 44 and the change in numbers is expected to vary across the borough.

1.8 The 2001 census was the last official count and showed that in 2001 the London Borough of Bexley had a minority ethnic population of 12.1% (excluding White British), which was slightly lower than the national average (13%) and significantly lower than the average for London (40%). Even back in 2001, these figures varied significantly across the Borough from 31.5% in Thamesmead East ward to 7.1% in Crayford (census 2001) but the latest projections suggest that these numbers have increased considerably and the current estimated minority ethnic population of the Borough as a whole is around 14% with much higher numbers in some areas and expected to increase to 18% by 2031. There are 13 main ethnic groups, of which the largest populated group is Asian/Asian British, Indian. Over 42 different languages are spoken in the Borough. Further information about the ethnic breakdown of the Borough's population can be found on the Council's website.

Figure 1.3: Expected population change between 2008 and 2031 by key age group

Population change - mid 2008, 2021, 2031



1.9 The 2001 census shows there are currently around 89,500 households in the Borough. Nearly 98% of the dwellings are occupied and 79% are either owned outright or with a mortgage or loan. The London Borough of Bexley does not hold any of its own housing stock following a stock transfer in 1998 but around 14% of households rent from a housing association or social landlord. The remaining 7% of households are rented either privately or from another source.

1.10 The latest figures from the ONS Annual Population Survey (2008/09) shows that Bexley has an economically active population of 109,400, of which 101,700 are in employment. Of those in employment, just over 90% are employees and the remainder are self-employed. The survey has also shown that the Borough has slightly fewer people in managerial and professional occupations (44.2%) than the London average (54%) and higher numbers of people in trade (11% compared with 8% in London), or administrative occupations (16% compared with 7% in London). Figures show that of those employed, Bexley has higher numbers of people working part time (35.7%) compared to the London average (26.1%). According to the findings of the recent Bexley Local Economic Assessment, in 2008, there were 65,100 jobs in Bexley, accounting for 1.6% of London's total jobs.

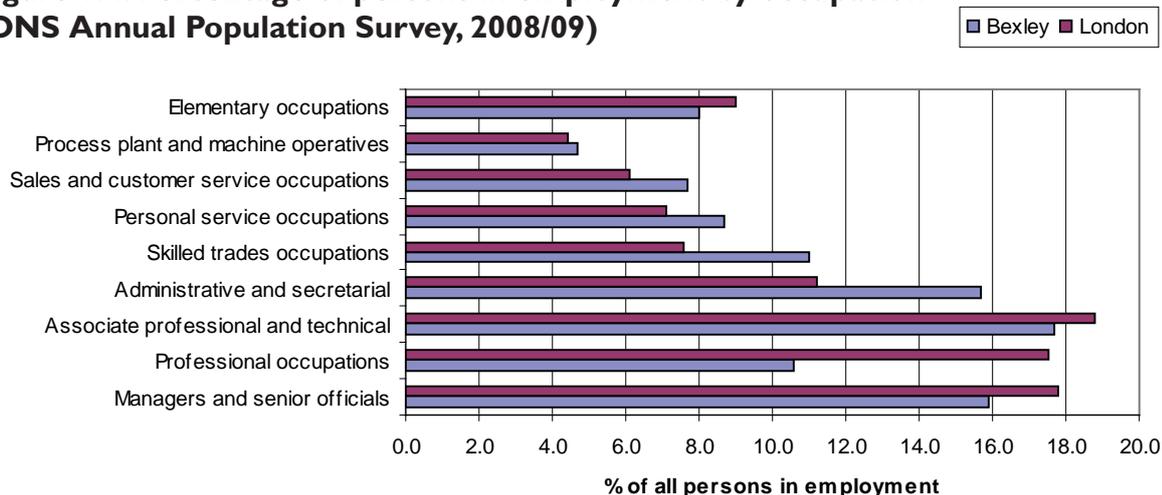
1.11 Unemployment for the Borough as a whole is generally low (3.4% compared to the London average of 4.5%), but there are small pockets within the Borough where the numbers are significantly higher. Unemployment amongst young people (aged 16 to 24) is slightly lower (9.3%) in Bexley than London as a whole, (14.5%) and there are fewer people who are long-term unemployed – 13% unemployed for over a years compared to 16% for London.

Table 1.1: Unemployment by ward (ONS, April 2010)

Ward	Unemployment rate (%)
North End	7.8
Thamesmead East	6.1
Belvedere	4.9
Colyers	4.7
Erith	4.7
Crayford	4.3
Cray Meadows	3.8
St. Michael's	3.7
Lesnes Abbey	3.7
East Wickham	3.2
Danson Park	2.7
Barnehurst	2.7
Falconwood and Welling	2.7
Northumberland Heath	2.6
Christchurch	2.6
Blackfen and Lamorbey	2.2
Brampton	2.1
Longlands	2.0
St. Mary's	2.0
Sidcup	1.9
Blendon and Penhill	1.6

1.12 The overall picture shows that the borough does have pockets of deprivation that the Council and other partners are working to tackle. The Index of Multiple Deprivation 2007 (IMD 2007) combine 37 indicators covering different aspects of deprivation, into a single deprivation score for each small area in England known as Lower Super Output Areas (LSOA). This allows each area to be ranked relative to one another according to their level of deprivation. The different indicators

Figure 1.4: Percentage of persons in employment by occupation (ONS Annual Population Survey, 2008/09)



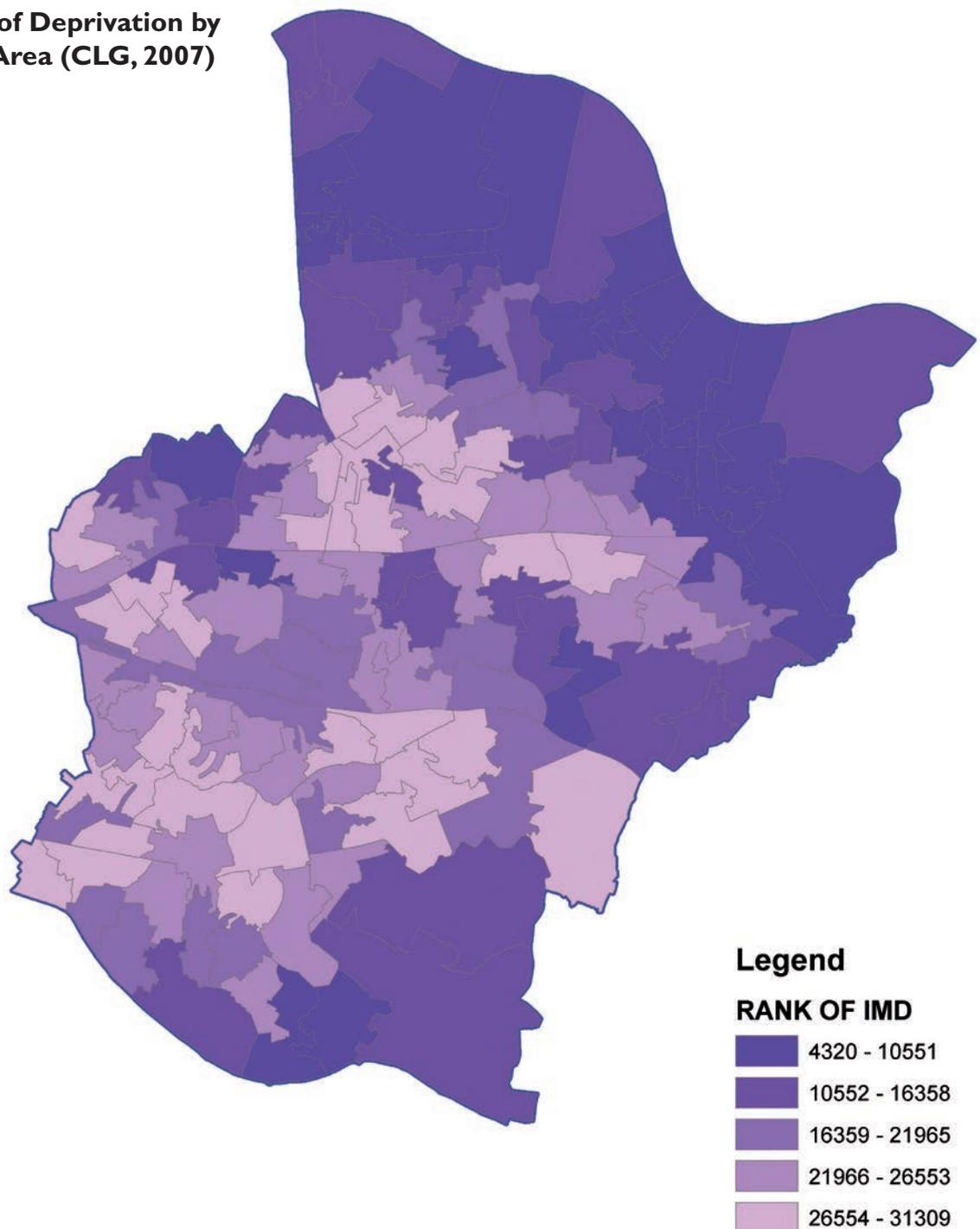
cover Income, Employment, Health and Disability, Education, Skills and Training, Barriers to Housing and Services, Living Environment and Crime. These are weighted and combined to create the overall IMD 2007 for areas in Bexley and is shown in Figure 1.5.

Development Opportunities

1.13 As recognised by the London Development Agency, there are major short-term development opportunities in the Thames Gateway South, including Bexley. Belvedere and Erith are important industrial locations, which seek to attract new uses and activities, that will generate significant employment opportunities. The Belvedere Employment Area, Slade Green and Crayford are endowed with sizeable employment locations.

1.14 In 2003 there were over 78,400 jobs in Bexley. Although traditional manufacturing industry has declined in line with national trends, Belvedere has the second largest manufacturing area in London. Belvedere is also becoming increasingly important for the logistics/ distribution sector. While the retail and wholesale sectors provided most jobs (28%), there were similar numbers in utilities and construction and the public sector. Between 1999 and 2001, the rate of growth of jobs in the Borough was 13%, compared to 1% in neighbouring Greenwich so that some 90% of the additional jobs in Thames Gateway South occurred in Bexley. However, the overall growth in Thames Gateway South was less than half the rate of London during this period, but Bexley itself mirrored the London trend.

Fig 1.5: Indices of Deprivation by Super Output Area (CLG, 2007)



1.15 The Woolwich-Crayford area forms one of the “Zones of Change” identified in the Sustainable Communities Plan published in February 2003 by the then Office of the Deputy Prime Minister (ODPM). This area covers North Bexley, including Thamesmead, Belvedere, Erith, Slade Green and Crayford Town Centre. The draft replacement London Plan (October 2009) has identified 33 Opportunity Areas defined as “the capital’s major reservoir of brownfield land with significant capacity to accommodate new housing, commercial and other development linked to existing or potential improvements to public transport accessibility”. Bexley Riverside (relating to parts of Erith, Crayford, Slade Green and Belvedere), Thamesmead and Abbey Wood are included in this category. Working with the GLA and LDA, Bexley commissioned a number of Development Frameworks to identify ways of intensifying and developing land use and improving communication links in these areas. The Council’s LDF Core Strategy has also identified Erith, Slade Green, Crayford, Belvedere and Thamesmead and Abbey Wood as ‘sustainable growth areas’ in the Borough. The Council has adopted a new Framework and Planning Brief to include redevelopment of the Erith Western Gateway area. The 5.5 hectare site represents a unique opportunity to deliver significant regenerative benefits through the development of a new highly sustainable riverside community; providing a mix of housing, employment and retail/leisure uses. Work is in progress.

Sub-regional development and the impact of regeneration

1.16 Bexley’s location at the heart of the Thames Gateway London sub-region offered it a unique opportunity to promote regeneration in the north of the Borough. The previous Government’s Sustainable Communities Plan identified the Thames Gateway as a major growth area with potential for accommodating over 120,000 new homes and over 200,000 jobs by 2031. The Mayor of London’s draft replacement London Plan supports the development of the Thames Gateway as one of the two growth areas designated by national Government and which fall partly within London. The Mayor has also recognised that in the Thames Gateway there is ‘particular scope for strategically coordinated consolidation and/or reconfiguration of parts of some Strategic Industrial Locations’.

1.17 New housing and employment growth will have implications for local services and infrastructure and will also impact on existing residents and businesses. The challenge for the London Borough of Bexley and its partners is to use the opportunities presented by investment in Thames Gateway to sustain and improve the quality of life of the existing and new residents of the Borough as well as the attractiveness of the Borough for new inward investment. As explained earlier, North Bexley has significant potential and opportunity, as well as substantial needs.

1.18 The London Plan has indicated the Mayor’s intention to adopt a new sub-regional structure (with five sub-regions) as the basis for the implementation of the Plan and other strategies. Within this framework, Bexley and nine other boroughs are placed in the East Sub-region. In developing a East Sub-regional Transport Plan, TfL published, in February 2010, an interim report on ‘challenges and opportunities’. This formed the basis of the subsequent *Sub-regional Transport Plan: East*. Published in November 2010. According to this report, East London has one of the greatest challenges of all the London sub-regions – to accommodate significant levels of new housing and jobs while enhancing existing neighbourhoods and creating new mixed communities. The report has demonstrated that the challenge for East London Sub-region is to drive forward sustainable regeneration that can benefit local residents as well as playing a vital role in supporting London’s growing population and labour market for the next 20 years. Bexley shares this vision.

The Local Strategic Partnership and Community Strategy

1.19 The London Borough of Bexley has a strong tradition of partnership working with agencies from the statutory, business and voluntary sectors. The Partnership for Bexley is the Borough’s local strategic partnership (LSP) which was formally launched in 2002, with members representing organisations from the public, private and voluntary sectors. The Partnership for Bexley Steering Group meet throughout the year to co-ordinate and monitor the work of the Partnership for Bexley and the full partnership meet annually at the Partnership’s Annual Conference.

1.20 The Partnership for Bexley has developed a 10 year vision for Bexley’s future, the Sustainable Community Strategy. Entitled *Bexley Together*, the strategy document outlines how the Council and its partners can enable everyone within the Borough to enjoy a better quality of life, both now and in the future. The strategy sets out plans to develop a strong, sustainable and cohesive community through:

- Building Safer and Stronger Communities.
- Developing Services for Children and Young People.
- Developing Healthier Communities for Adults.
- Promoting Economic Development and the Environment.

1.21 Local Area Agreements (LAAs) were a Government initiative (now intended to be abolished by the Government) aimed at reducing Central Government bureaucracy and simplifying financial arrangements. They represent three-year agreements between the Government, the Council and partner organisations to improve local services and outcomes for everyone within the Borough and includes a series of ambitious performance targets which the Council, with its partners, must achieve.

1.22 Bexley's first LAA was signed in April 2007 and was completed at the end of March 2010. Over the last three years this agreement has delivered a number of achievements, including

- Reduction in the number of 16 to 18 year olds not in education, employment or training.
- Reduction in the number of incidents of criminal damage recorded.
- Reduction in the number of streets with unacceptable levels of litter and graffiti
- Increase in the amount of municipal waste recycled or composted.
- Increase in the number of people quitting smoking within 4 weeks.
- Reduction in the number of accidental fires and fire related injuries.

1.23 The performance figures for the end of the agreement are currently being finalised. Provisional figures were published at the end of April as part of the Council's Quarterly Monitoring Statements and the full set of final figures will be available on the Partnership for Bexley website in the summer.

1.24 Bexley's second LAA (2008-2011) was signed in June 2008 and was developed based on the priorities set out in the Borough's Sustainable Community Strategy. The targets within the LAA are monitored closely by the Council and in addition, the then Government Office for London reviewed Bexley's progress against LAA targets twice a year. LAA performance monitoring reports provide an update on how well the Partnership is performing against all of the targets listed in the LAA .

1.25 This partnership approach has significant implications for the delivery of a Local Implementation Plan in the Borough. This is because the Council, working in partnership with key stakeholders, will be in a better position to understand and respond to the needs of local communities, including residents and businesses. The Sustainable Community Strategy sets out the vision for Bexley for the entire period of the LIP and provides a strategic focus in conjunction with the UDP/LDF and the Borough Transport Strategy.

Local Development Framework: Core Strategy

1.26 The Planning and Compulsory Purchase Act 2004 heralded a change in the Council's approach to its strategic land use plans. A new style plan – a Local Development Framework (LDF) – will replace the Unitary Development Plan (UDP). At the heart of the LDF is the Core Strategy, which includes a vision for the Borough and ways to achieve that vision. This vision is derived from and supports the Council's Sustainable Community Strategy vision for the Borough.

1.27 The Submission Draft Core Strategy of Bexley's LDF Development Plan Document was published in November 2010. This document sets out a spatial planning framework for the long term development of the Borough, ensuring that investment decisions are not made in isolation, but are

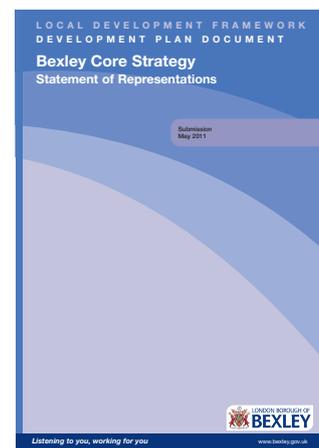
properly coordinated, with a focus on promoting the principles of sustainable development. Spatial planning goes beyond traditional land-use focused planning. It includes policies and proposals for meeting the community's economic, environmental and social needs in the area, and integrates policies for the development and use of land with other policies and programmes that influence how places look, feel and function.

1.28 In view of the need for an integrated approach in land-use and transport planning, it has been important to take into close consideration the Core Strategy of the LDF in preparing the LIP. In particular, the Transport Policies in the Core Strategy have been taken into account in formulating the Transport Objectives of the LIP in Chapter 3 of this document.

Local Economic Assessment

1.29 As required under the Local Democracy, Economic Development and Construction Act, the London Borough of Bexley has recently formulated a Local Economic Assessment (LEA) of the Borough. The aim of this LEA is to ensure that Bexley's economic development and related strategies are informed by a robust evidence base. This includes identification of the local constraints on economic growth and employment and the risks to delivering sustainable economic growth. The study, conducted by specialist consultants, demonstrate the immensity, complexity and urgency of the challenges facing the Borough and its businesses and public sector partners.

1.30 Transport was an integral element of the study and the research demonstrated the close linkage between good transport provision and economic development and employment. The findings of the LEA have informed the preparation of the LIP, as appropriate.



Chapter 2 The Local Transport Context

Transport Demand

2.1 The previous chapter has analysed the land use and socio-economic context of the Borough. This has, among other things, highlighted the development patterns and pressure for development in Bexley. In particular, there are major regeneration opportunities in the north of the Borough within the Thames Gateway where accessibility improvements will be a key element. The Thames-side area needs to be rendered fully accessible by means of a multi-modal route corridor. This will require the improvement of public transport links and facilities, and better provision for walking and cycling. There are also the general issues concerning car ownership and travel patterns of the Borough residents. Together, these influence the present and future demand for transport in the Borough.

Car Ownership

2.2 Bexley has the second largest (60%) car ownership in London. According to London Travel Demand Survey 2006-09, 27% of the Borough's households possess two or more cars. However, 21% of the Borough's households do not have access to a car which is down from 24% (compared to the London average of 37%) indicated in the 2001 Census. Car ownership does however vary across the Borough, particularly in wards within the northern part where the percentage of households without a car is higher than the average figure.

Trips and Mode Share

2.3 As reported in the London Travel Demand Survey 2006/9, trip rates (2.1 per person per day) are particularly low in Bexley, compared to both the East London sub-region and the London average. Shopping, personal business and leisure account for the major part of the trips – some 55%, followed by 27% for commuting and other work related trips. The car is the main mode of transport for Bexley residents (60%) and is significantly higher than the Greater London and East London average. 60% of the economically active population work outside of the Borough and of these people, the majority (81%) work within other London local authority areas. The car is the most popular means of transport for journeys to work. This is partly a reflection of the high car ownership in the Borough, and in part because of the inadequate public transport facilities that often fail to provide a viable alternative to the car. The 2001 census showed that 51% of workers travel to work in a car, either as a driver or as a passenger. This compares to a London average of only 36%. Around 85% of the people who use public transport to get to and from work, have access to a car, compared to only 64% in London and 69% nationally. Without major investment in public transport services, it will be extremely difficult to influence change in these trends, especially if regeneration is to be encouraged.

2.4 Table 2.1 shows the distribution of all trips by mode in the Borough compared with the East London Sub-region and Greater London. As the Borough is outside the London Underground network, public transport use is relatively low. Cycling and walking trips follow the same pattern as in the East London Sub-region and Greater London. However, the proportion of car and motorcycle trips is substantially higher in Bexley.

Table 2.1: Trips by mode (percentages) in 2006/09

	Rail	Bus	Underground & DLR	Taxi & other	Car & motorcycle	Bicycle	Walk
Bexley	7	8	N/A	1	60	1	32
East London Sub-Region	3	14	6	1	42	1	32
Greater London	4	14	7	1	41	2	31

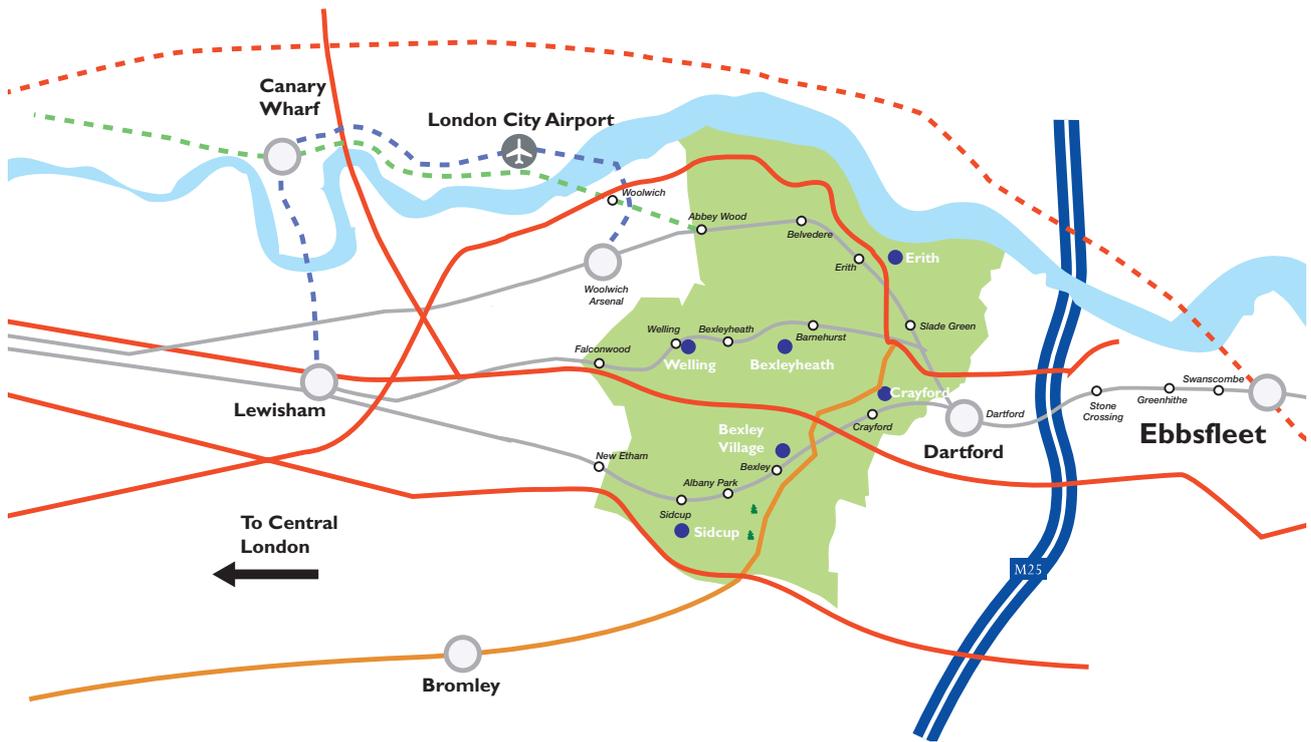
Source: London Travel Demand Survey 2006/09

Table 2.2: Trips by purpose

	Commuting	Other work related	Education	Shopping & personal business	Leisure
Bexley	19	7	15	33	21
East London Sub-Region	18	6	15	31	23
Greater London	17	6	13	30	27

Source: London Travel Demand Survey 2006/09

Fig. 2.1: Sub-regional Connectivity



-  Interchanges
-  Strategic Roads
-  Strategic Rail Route
-  Crossrail
-  DLR
-  High Speed 1



2.5 The importance of local facilities to residents is reflected by the distance people travel. A quarter of all journeys in the Borough in the 1991 London Area Transport Survey (LATS) were under 1km, with just over two thirds (69%) of all journeys being under 5km. According to the 2001 Census, 12% of Bexley workers travel less than 2 km to get to work and 28% travel less than 5 km.

2.6 As demonstrated in Table 2.2, the share of commuting trips to the usual place of work for Bexley residents is slightly higher than the sub-regional and Greater London average. However, the pattern is generally similar for most trip purposes.

2.7 The majority of all weekday trips (67%) by Bexley residents during 2006-09 began and ended in the Borough. The next most popular destinations were the Borough of Greenwich (12%), South London Sub-Region (5%), Central London Sub-Region (5%) and outside Greater London (7%). In all, 83% of the trips had a destination within the East London Sub-Region.

2.8 As regards access to jobs, 40% of Bexley residents work locally (2008 figure). The great majority of other working residents travel into inner London and a minority go to Kent. Figure 2.1 illustrates the Borough's sub-regional connectivity (including strategic rail and road routes) and Fig. 2.2 shows the overall transport geography and the major trip attractors. As transport provides a vital means of access to employment, leisure and a range of goods and services, the Council is seeking better transport links across the Borough and with neighbouring areas, particularly to reduce social exclusion.

Transport Supply

Road Network

2.8 There is a total of 519 km of public highway in the Borough including 9.8km of former trunk roads for which the Mayor is now responsible, and another 62 km of the most important borough roads which are classified as Principal A roads. A hierarchy of roads has been adopted in the Unitary Development Plan (UDP) and updated to show the revised classifications proposed in Regional Guidance (Fig. 2.4).

2.9 The Council is responsible for traffic and transportation matters relating to all roads in the Borough with the exception of the Transport for London Road Network (TLRN) roads A2 and A20 for which Transport for London (TfL) is the Highway Authority. The approval of TfL is needed for certain highway and traffic proposals, which affect the operation of the newly defined Strategic Road Network (SRN)

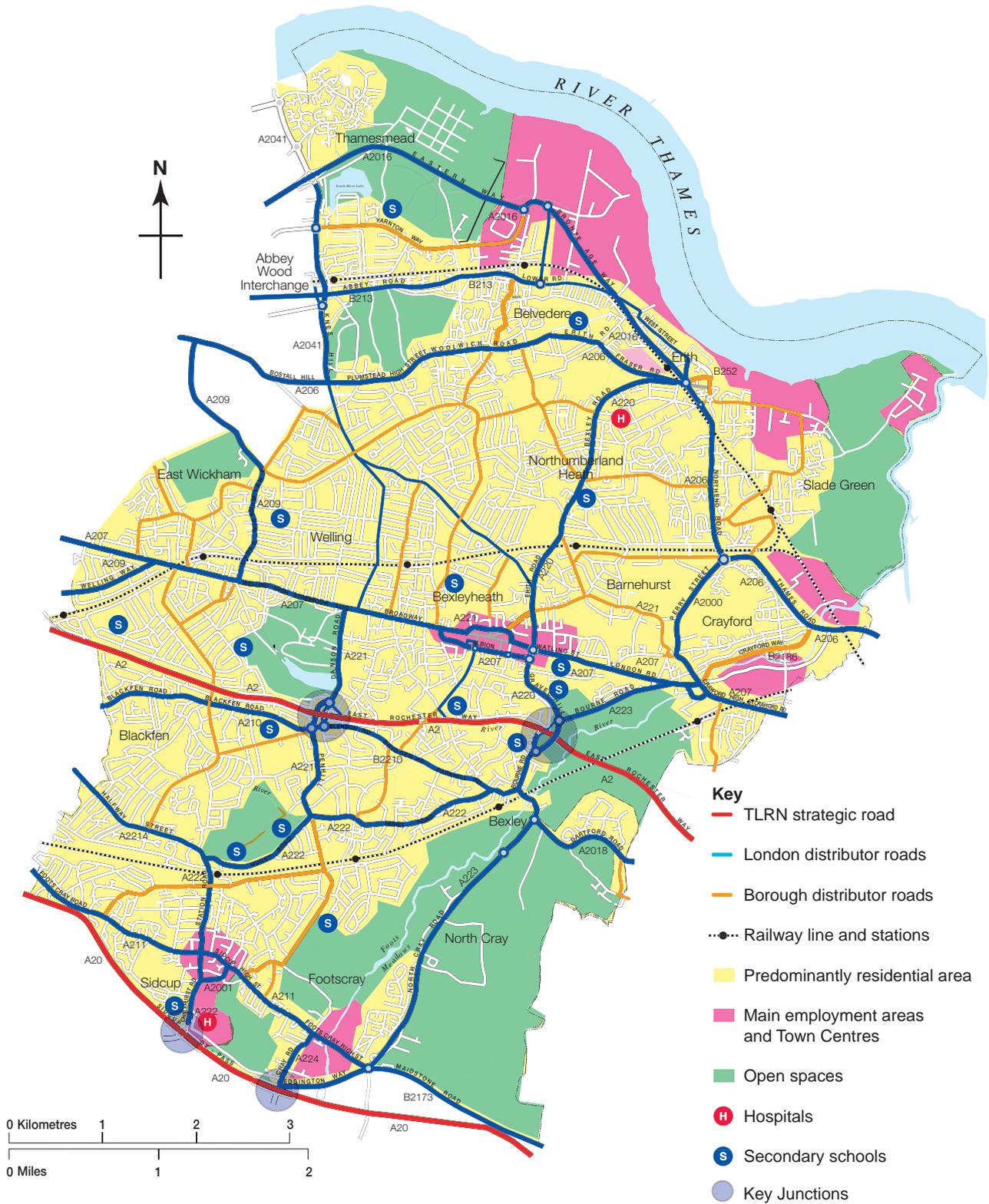
2.10 Some main traffic routes pass through town centres, residential and conservation areas, resulting in problems of congestion and environmental damage. Particular problems exist in Bexley Village and Crayford Town Centre where London distributor roads, forming part of the newly defined Strategic Road Network (SRN) pass through the main shopping areas and conservation areas.

2.11 The A2 TLRN road is at or near capacity for extended peak hours, which leads to drivers using local roads as alternative routes. The road at present carries as much as 100,000 vehicles per day, of which 4,500 per hour take place in the evening peak period. The opening of the Dartford Northern Bypass as part of the South Thames Development Route (STDR) has led to traffic levels on the A206 Thames Road increasing by more than 50% and there are extensive queues in the peak periods. Proposed developments in the north of this Borough and the Kent Thames-side area could potentially result in further delays and congestion. This situation has been improved after the completion of the Thames Road Improvement project with the help of funding from both the ODPM and TfL. To maximise the benefit from this scheme, however, it will be important to improve the A220/A2016/A206 junction (Queens Road roundabout) on the STDR in Erith Town Centre.

2.12 The Queens Road roundabout is a major junction at the heart of the Thames Gateway Area effectively providing direct access to Erith town centre from the South Thames Development Route, Northumberland Heath, North Belvedere, North End and Crayford. The junction is currently operating at capacity and emerging developments are clearly likely to exacerbate traffic conditions and associated problems. Bexley's first LIP therefore included a proposal to improve traffic flows, enhance and promote bus usage, movements and reliability, reduce severance of the town centre from the adjoining station and residential areas and improve conditions for pedestrians and cyclists. Since then, the Council has undertaken major efforts on Erith Western Gateway regeneration and detailed modelling and design work are underway with regard to the Queens Road junction improvement scheme. A planning application in connection with this scheme has been submitted and sources of funding are being determined.

2.13 Many roads in the Borough are of a relatively low design standard and the few north-south routes are particularly poor. Some housing is close to the highway limits, with limited space for off-street parking. Consequently, in some roads the Council has granted exemptions, after taking into account pedestrian and traffic needs, to allow parking on footways. The narrow roads make it difficult to introduce wide-spread bus priorities.

Figure 2.2: Bexley's Transport Geography/Trip attractors



2.14 There are many principal (A class) roads in the Borough that are in need of structural maintenance and a large amount of continued investment will be required to maintain their overall condition. The Government and the Mayor of London have given priority to removing the backlog of road maintenance in London as identified within the Mayor's strategy. Over recent years the Borough has commissioned the London Borough of Hammersmith and Fulham, as part of the TfL Lotag Roads2000 project, to carry out detailed condition surveys to identify a programme of improvements. Following the analysis of the data from the condition surveys, the principal roads in worst condition are selected and prioritised for renewal works. In addition to the actual condition of the road, other factors are also considered. For example, if it involves a bus route, or, if there are other works planned to be implemented shortly on the same road, such as a regeneration or a traffic safety scheme, all of these can be combined into a single project, thereby reducing overall disruption. Such factors will influence scheme prioritisation and will bring added value to the selection process. Following this, a three-year programme of work is updated annually. Within the Borough's Highway Asset Management Plan (HAMP) various options are examined to consider what will be the impact of different levels of investment that will lead to improving the Principal Road Network.

2.15 The London Borough of Bexley has the second largest Principal Road Network in London. The National Indicator NI 168 for 2009/10 for the Borough is recorded at 4%, that is the percentage of the Principal Road Network that should be considered for structural maintenance. This performance Indicator has shown continuous improvement. Within the Borough's HAMP various investment options have been considered to

ascertain the impact of different levels of investment that will lead to maintaining and improving the network. The model for the Principal Road Network indicates that an annual investment in excess of £1.5 million is required to maintain this required rate of continued improvement as recorded at National Indicator level. The way this Borough effectively maintains the Principal Road Network and targets expenditure has fortunately been well recognised by TfL. In the past this has been reflected in the funding settlement for the Borough Spending Plan. However, more recently it is believed that the level of funding is becoming insufficient to maintain this improvement and it is hoped that funding will increase appropriately in the future years. The Council also provides its own funding for the maintenance of the non-principal road network and for 'non structural' repairs on principal roads.

2.16 As demonstrated in Figure 2.3, during the period 2005/06 to 2008/09 Bexley's principal roads showed significantly improved condition against the national performance indicator, NI168. Bexley is performing within the top quartile of London Boroughs for its principal road network. In addition, Bexley has performed better than the target performance and aims to continue to perform in the top 25% of London Boroughs and maintain a steady state principal road network. This will require an ongoing asset management approach to maintaining the principal road network to sustain the current levels of performance.

Efficiency of Traffic Movement

2.17 Figure 2.5 illustrates the main traffic flows on the Borough's roads. According to the Department of Transport's National Road Traffic Survey, vehicular

Fig. 2.3: Principal Roads in need of repair: targets and performance

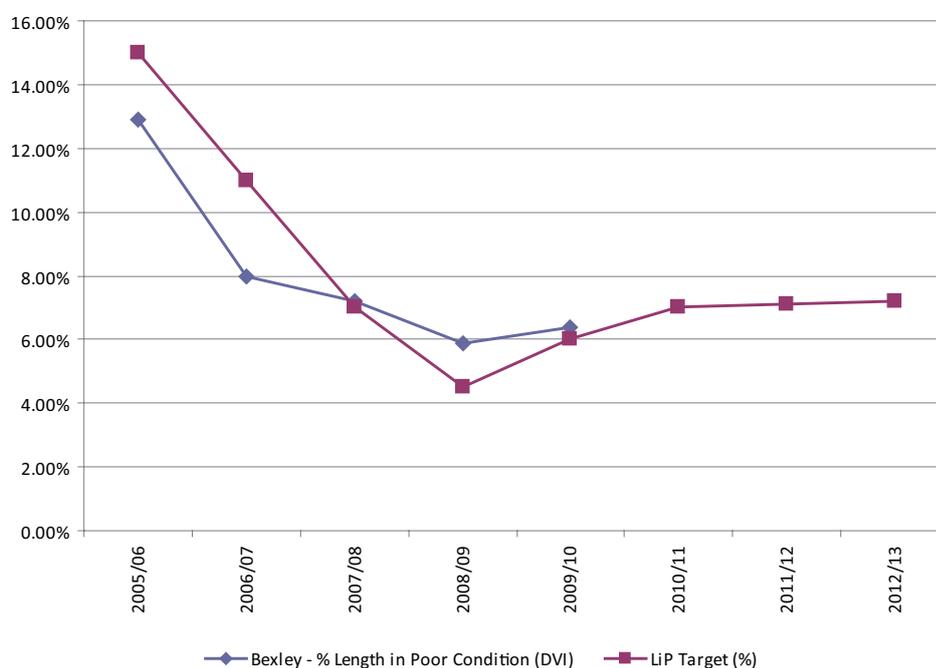


Figure 2.4: The Road Network



traffic flows in Bexley showed a progressively rising trend in the past, demonstrating over 18% increase between 1993 and 2004. However, traffic declined by 3% between the years 2004 to 2008. Analysis of traffic flows on the Borough's traffic census sites located on three screenlines show local variations:

- (a) traffic levels in the north of the Borough are rising more rapidly than flows in the south, reflecting the faster rate of increase in car ownership in the north; and
- (b) traffic movements to and from the north of the Borough have increased over recent years, due to regeneration in the Thames Gateway.

2.18 For several years, the Council has been conducting an annual programme of journey time surveys across the Borough on selected routes, providing information on the level of service of each particular route, including the delays. Fig 2.6 illustrates average journey times in the morning peak period. The slower speeds on the north-south routes in the south of the Borough highlight the problems of moving between and across A2 and the A20. The Plan also demonstrates the problem on Thames Road, Crayford, a part of the South Thames Development Route. The recent improvement of Thames Road is expected to help resolve this problem.

Public Transport

2.19 Inadequacies in the Borough's public transport services have been a matter of considerable concern for many years. A particularly glaring limitation of Bexley's public transport provision is the fact that the entire borough is outside the London Underground Network. Provision of high-quality public transport facilities in the Borough is therefore considered a high priority by the Council.

2.20 Figure 2.7 shows the relatively low public transport accessibility level (PTAL) in the Borough. This is based on the TfL's computer model that ranks the weekday rush hour scheduled availability of buses and trains on an ascending scale of 0 to 6 (6 being the highest level of accessibility). The model also takes into account the time and difficulty of walking to the nearest bus stop or train station. It may be seen that parts of the Borough are relatively better served than others. The highest level of public transport accessibility in this Borough is level 4, related to Bexleyheath Town Centre and most of business centres in Bexley have a low PTAL score of only 2.

The Rail Network

2.21 Figure 2.8 shows the rail network in the Borough. Three east-west railway lines providing services, operated by Southeastern Railway, between Dartford and Central London, serve the Borough; there are no

north-south lines. Many stations are not close to the main town centres and commercial areas of the Borough and serve mainly commuters and other travellers to Central London. However, Southeastern Railway runs a passenger service linking the Sidcup line to the Abbey Wood - Slade Green line, effectively allowing for north-south rail services in the Borough for much of the day.

2.22 When considering access to rail stations Bexley compares unfavourably with other London boroughs. Only 40% of the Borough's population live within 800 metres of a rail station (the planning criterion used by rail companies and London Transport), ranking it 31st out of 33 boroughs. Only Havering and Hillingdon have lower figures. Despite the distance to stations, a high proportion of residents make use of rail. Data from the 2001 census shows that 24% of the Borough's residents use rail as the primary mode of transport to work; the fourth highest of any London borough. There is a clear need to optimise bus, cycling and pedestrian links to stations. The London Underground System does not serve this Borough, nor does DLR or Croydon Tramlink.

2.23 In December 2009 Southeastern Railway carried out a major timetable revision which introduced 200 additional services across the network and a 5% increase in capacity. The change coincided with the introduction of the high speed services between Kent and St Pancras station. Whilst the increase was generally welcomed, the Council received complaints from passengers travelling from stations east of Sidcup in respect of reduced services to Charing Cross.

2.24 Lewisham station is an important interchange for the growing workforce based at Canary Wharf. However, around half the trains on the Sidcup line bypass Lewisham. The Council would like to see capacity issues at Lewisham resolved in order to allow more trains to stop at the station.

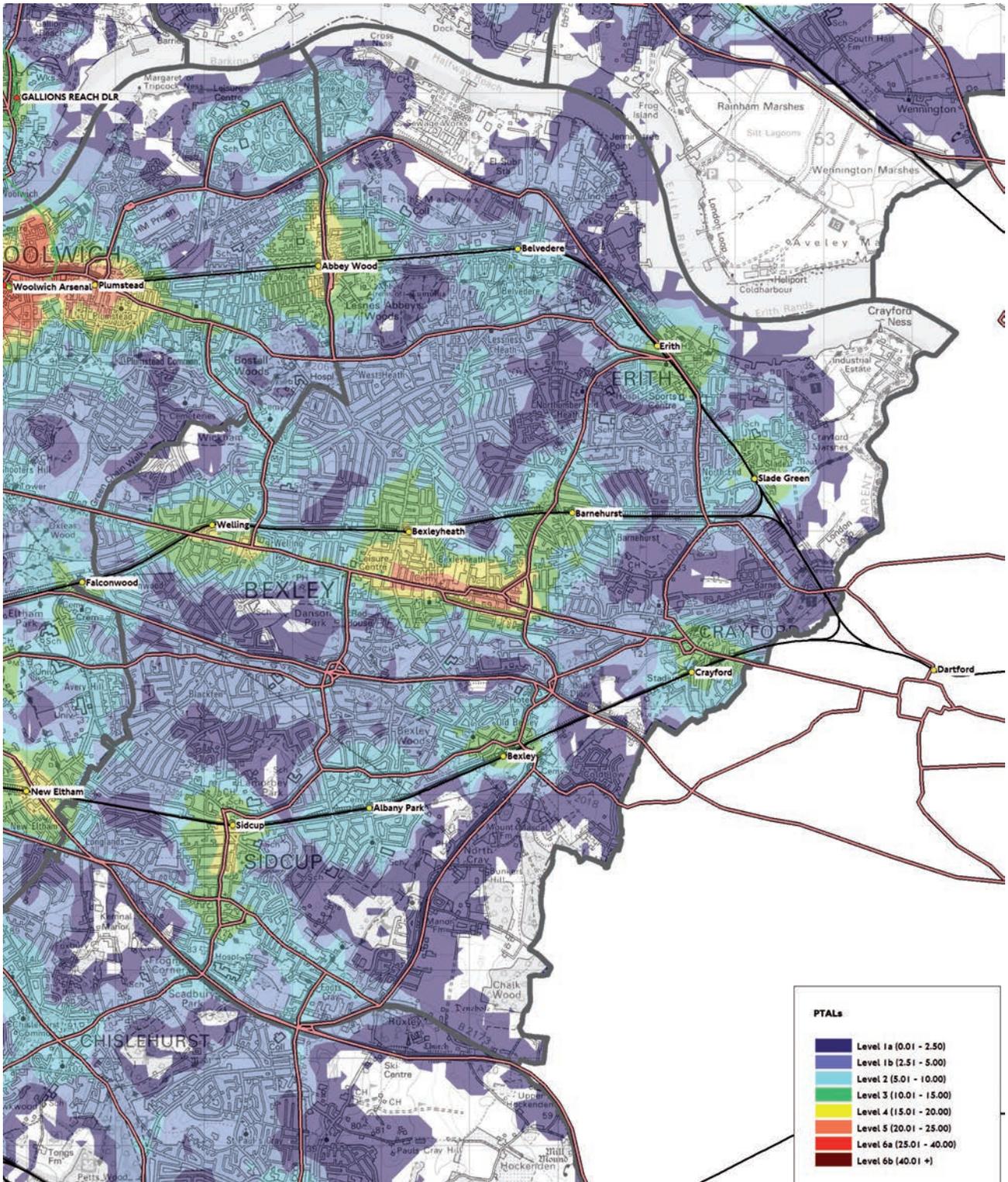
Bus Network

2.25 Buses provide a significant mode of public transport in Bexley, especially for the 21% of the households who were reported having no cars at the time of the 2006-09 London Travel Demand Survey. There are 37 bus routes serving the Borough, providing links within Bexley and to neighbouring areas, and accounting for most of the local orbital public transport connections. Of these, 27 operate over a seven-day period (one of these is a 24-hour service), six run on school days only, one operates all but Sundays, and there are three night buses. Figure 2.9 shows bus routes in the Borough and daytime frequencies for weekday services. Some 92% of the population lives within 400 metres of a bus stop; the average across London is the same. Patronage is high on the most heavily used bus routes with a total of 5.94 million passenger trips per year.

Figure 2.5: Traffic Flows on Major Routes 2009



Figure 2.7: Public Transport Accessibility Levels in Bexley



2.26 The road network means that most bus routes run in a broadly east-west direction, with comparatively little opportunity to travel from north to south and vice versa. Orbital connectivity can be improved by encouraging public transport links between the north and south of the Borough and emphasising the need for good connections between rail and bus services.

2.27 Concerted efforts continue to be made by the Council to secure and maintain high-quality bus service provision throughout the Borough. A quarterly liaison meeting enables London Buses, bus operators and the Council to identify problems, review performance, highlight possible areas of future demand and consider how services might be improved. Coordination between different modes of public transport is enhanced by Southeastern Trains' attendance at this meeting.

2.28 Changes in patterns of healthcare provision, and particularly the centralisation of hospital services, in addition to new residential, schools and employment development can influence demand for bus travel. Local information is fed back to Transport for London via the liaison meetings and regular stakeholder consultation to be reflected in operational improvements.

2.29 Bexleyheath, Sidcup, Welling and Thamesmead town centres are well-served by buses, with Bexleyheath acting as a hub for services to the rest of the Borough. Other town centres are less well provided for, and a small area of the Borough still remains without a Sunday service. Issues relating to reliability, particularly to low frequency routes, can be a concern for local residents, and the Council works with bus operators to identify possible causes on those routes where this is a problem.

2.30 The Belvedere industrial area in the north of Bexley is poorly served by bus, particularly when access to the south of the Borough is considered. The opening of the DLR station at Woolwich at the beginning of 2009, and the announcement in March of that year that the Greenwich Waterfront Transit would not be going ahead has highlighted the need to review bus services in the north of the Borough as a whole.

2.31 The importance of Abbey Wood station as an interchange for Crossrail and Metro rail services is significant, and the need for good bus provision to the rest of the Borough, and particularly to destinations to the south should be emphasised. The emergence of the O2 at North Greenwich as a world-class entertainment venue in recent years is also emphasised in considering the provision of late-night bus services to Bexley as a whole.

2.32 The Council has provided input into the proposed siting of new generation Countdown signs at 35 bus stops in the Borough. Emphasis has been given to providing information at stops near to railway stations

as a means of facilitating interchange between bus and train, and to encourage orbital travel. The bus stop-mounted signs will be complemented by the provision of real-time bus information accessed via the internet and mobile phone text messages. In addition, the possibility of using 'virtual screens' displaying bus arrival information sited at, for example railway stations and supermarkets will improve further the information available to the bus-travelling public.

2.33 The main areas for consideration in the provision of bus services in Bexley focus on the following:

- Heavy reliance is placed on buses as a means of travel for non-car users.
- A number of the Borough's town centres suffer from relatively poor levels of accessibility to public transport.
- A lack of public transport links between the north and south of the Borough
- The need for good connections between rail and bus services to improve orbital connectivity.
- A requirement for bus services to be in place to serve new developments and changing patterns of demand.

Freight Movement

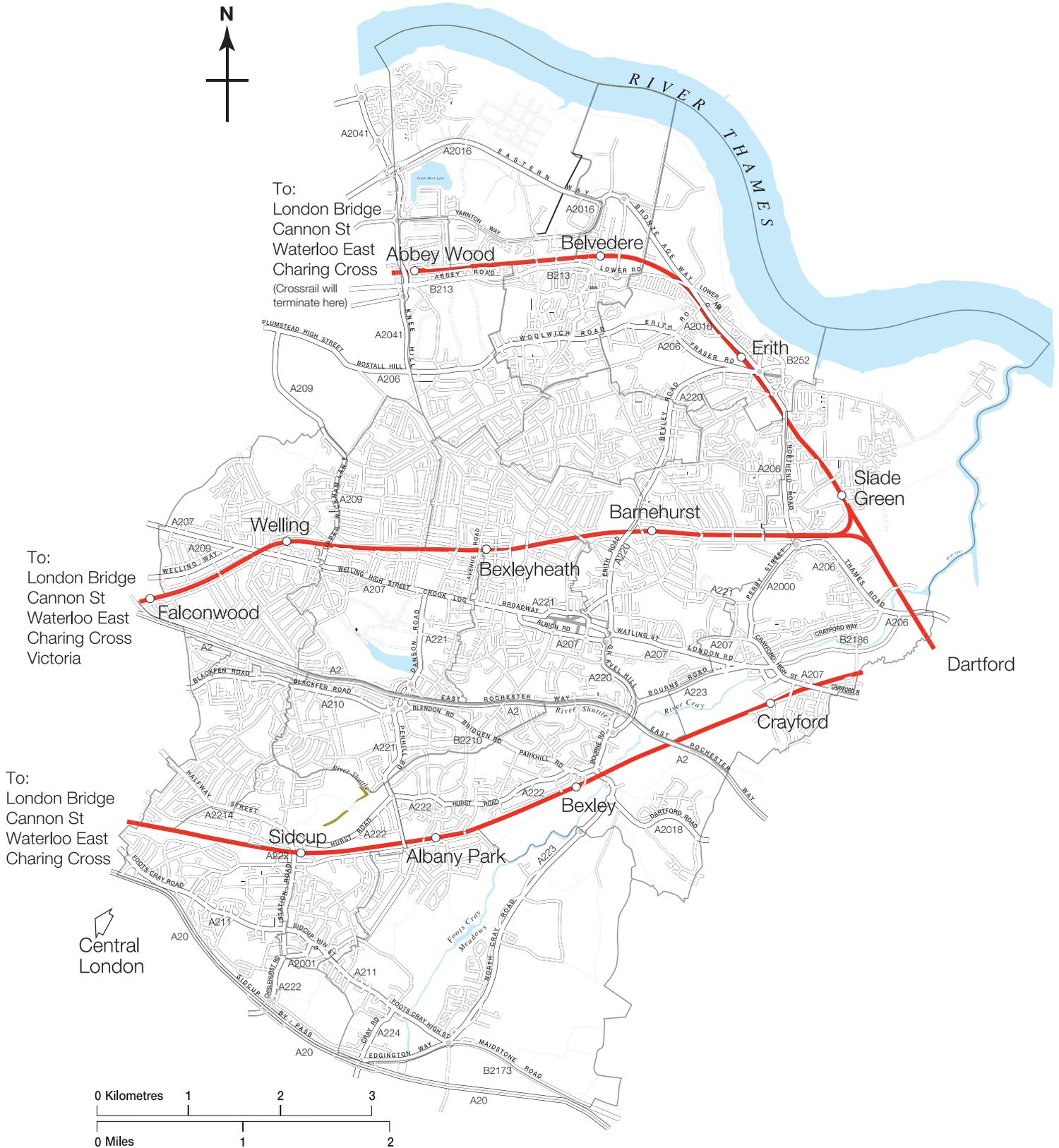
2.34 The South Thames Development Route carries the second highest flow of HGVs in the Borough (the A2 has the highest). The recent improvement of the remaining section of Thames Road to dual carriageway standard is expected to help freight movement in this corridor.

2.35 Problems of access for freight vehicles have been identified in Bexley for town centres and for industrial areas. The main issue for town centres is adequate servicing provision either off-street or on-street loading bays/areas. Complaints have been received from freight operators about locating industrial premises and finding suitable routes. Although the primary route signing improvements have been completed, the complementary local road signing remains to be updated.

Other Major Infrastructure Projects

2.36 A number of other major infrastructure projects in the sub-region have significant implications for the Borough's transport and traffic issues. These include the completed and fully operational Jubilee Line Extension, Channel Tunnel Rail Link (CTRL), Dartford Fastrack Phase I, as well as the planned Thameslink, recent reviews of the proposals for an additional river crossing, and the revised proposal for Crossrail. Some of these projects and their implications for Bexley are briefly described below:

Figure 2.8: The Rail Network



Crossrail

2.37 The proposal to develop and implement the Crossrail – a new east-west rail service across London – has a great potential to provide a major boost to the provision of public transport facilities for Bexley. Crossrail 1 will be a high frequency, high capacity metro service. The Council welcomes the fact that its two proposed lines in East London serve Thames Gateway and thus support the regeneration objectives of the area. Whilst the route of Crossrail to Shenfield has a strong transport case by relieving congestion, the major regeneration benefits arise from the route across the Thames to Abbey Wood with potential for extension to Ebbsfleet. The route to Ebbsfleet would allow people living in the south of the river to quickly access jobs in Canary Wharf and Docklands and the opportunity to create support industries south of the river. It will also permit reverse commuting by providing access to jobs in Woolwich, Belvedere and Dartford to people north of the river and to provide good transport connections with the Channel Tunnel Rail Link services at Ebbsfleet. Reverse commuting will also be facilitated for London residents going to the planned business districts at Ebbsfleet.

2.38 However, the Government's decision to terminate services of the southeast branch of Crossrail 1 at Abbey Wood rather than Ebbsfleet has been very disappointing for Bexley Council. The original proposal would bring about a significant increase in accessibility to the north of the Borough with reduced journey times to central London, the Docklands and Heathrow. It is seen as an essential element of Bexley's regeneration strategy and its ability to contribute to the Deputy Prime Minister's objectives of sustainable communities in the Thames Gateway. The decision to drop the Abbey Wood - Ebbsfleet extension reduces the benefits of the scheme as well as the Council's ability to deliver the Government's regeneration objectives for the Thames gateway.

2.39 Belvedere is identified in the London Plan as a Preferred Industrial Location and Belvedere/Erith is identified an Opportunity Area with growth estimates for 5,000 new jobs and 1,400 new homes by 2016. Bexley is working with the Mayor of London and other partners to develop the Belvedere Development Framework to help the area realise its potential. Public transport accessibility and connectivity is a major obstacle to development in Belvedere. The London Plan states that Opportunity Areas should be supported by improved public transport and with respect to Belvedere/Erith, adds that improvements in accessibility through Crossrail 1 will support regeneration and intensification. The Belvedere Development Framework assumed that Belvedere Station would be served directly by Crossrail. With Crossrail stopping at Abbey Wood, the development objectives for Belvedere/Erith could only be met if alternate transport improvements are introduced for example:

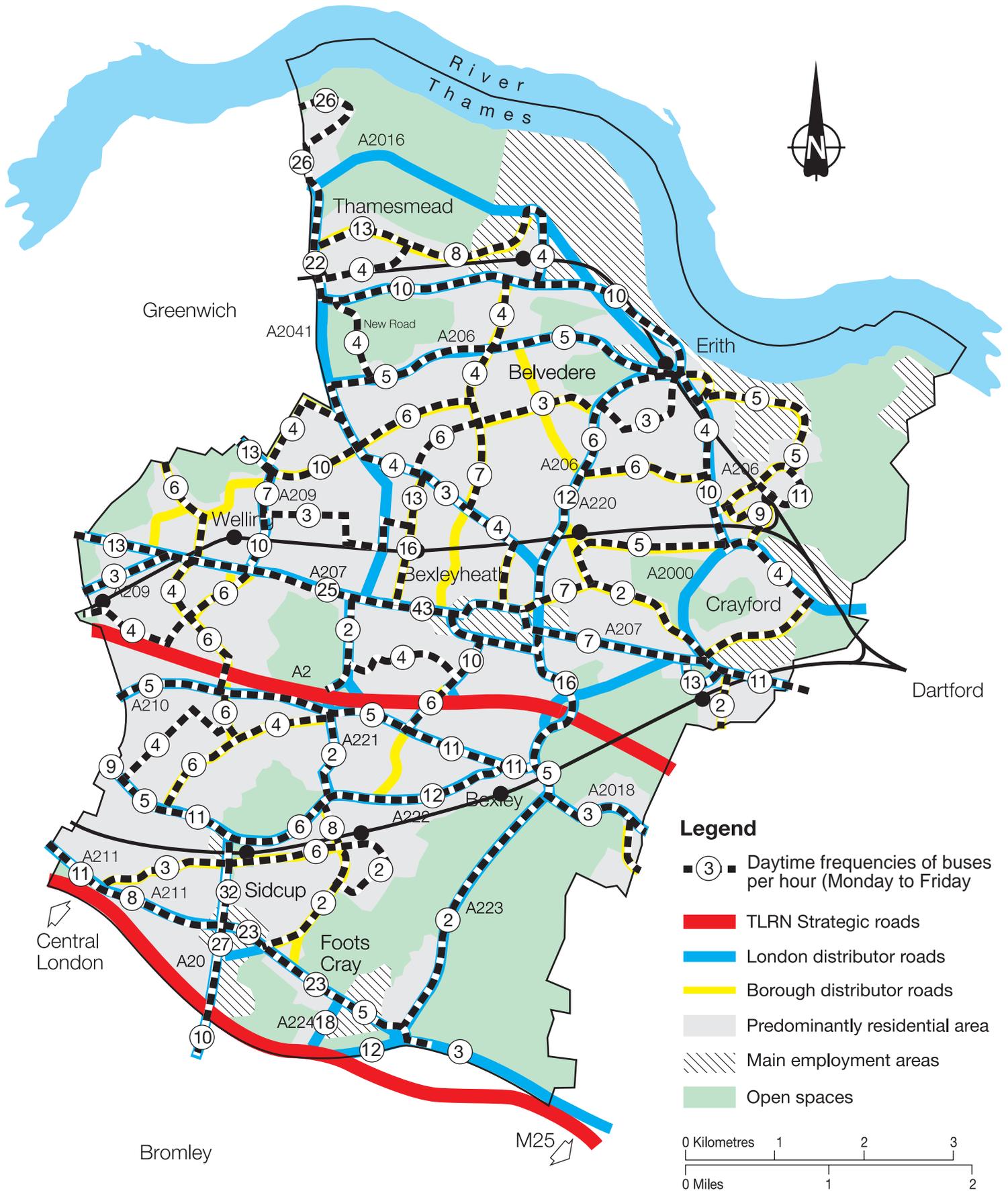
- improved services on the North Kent Line;
- improved bus services;
- the extension of the Docklands Light Railway to Bexleyheath via Erith;
- North Bexley Transit;
- the long-term extension of Jubilee Line to parts of the Borough.

DLR Extension

2.40 The continued growth of east London and the inner Thames Gateway requires that the Docklands Light Railway (DLR) has a new strategy to ensure that the railway is prepared for the challenges ahead and has provided for its future development and expansion.

2.41 Progress has recently been made in developing and implementing extensions of the DLR to the City Airport, Woolwich Arsenal, Stratford International and Barking Reach. Of these, the King George V to Woolwich Arsenal opened on 10 January 2009, with the terminal station built at or close to the planned future stop on the Crossrail line to Abbey Wood via West India and Royal Docks. With the development of the Eastern Docklands as part of the Thames Gateway initiative and London's successful bid for the 2012 Olympics, several extensions and enhancements are under construction, being planned or being discussed. DLR is now running longer three-carriage trains on its Bank – Lewisham route. The trains will operate on other parts of the DLR network when demand requires. Bexley considers it important that these schemes should include an extension to Thamesmead and Abbey Wood.

Figure 2.9: Bus Routes and Weekday Day-time Frequencies



Thameslink

2.42 The £6bn Thameslink Programme will offer more trains and better journeys for passengers on the Thameslink route running north-south through London. This route is one of the busiest and fastest growing, covering 140 miles and 50 stations, stretching from Bedford to Brighton. Begun in October 2008, Thameslink would allow for an increase in the frequency of the cross-London rail link between St. Pancras and Blackfriars from 15 to 24 trains per hour at peak times and provide cross London services to an increased number of destinations. In addition, train size will be increased from 8 car to 12 car length. Under its original proposals, Thameslink trains was expected to run on two of the three lines in Bexley providing wider travel opportunities for local residents, but this proposal seems to have been dropped now. On 25 November 2010 the Secretary of State for Transport made an announcement on Rail Investment that included confirmation that the Thameslink Programme would be delivered in its entirety; completion date is December 2018. These works will provide knock-on benefits to other rail networks using London Bridge station.

Dartford Fastrack

2.43 Kent County Council, with the Kent Thames-side Partnership, has promoted the construction of a high-quality public transport system, known as Fastrack. This is a combination of dedicated bus routes and services that provides sustainable transport both to support regeneration in existing parts of Kent Thames-side, and to enable new development opportunities. It incorporates both dedicated and newly constructed track and services, running on existing highways. Positioned in the hierarchy of public transport between the railway service and current bus services, Fastrack will ultimately connect nearly all of the major existing and new developments in Dartford and Gravesham with core express routes on which only Fastrack services will be allowed to run. In the Dartford Local Plan, Fastrack is seen as part of a wider policy designed to promote the use of public transport.

2.44 The first phase of Fastrack currently consists of two routes operated by Arriva Southern Counties on behalf of Kent County Council. Various measures are used to allow Fastrack vehicles to avoid traffic, including signal priority, reserved lanes, and dedicated busways. Fastrack began operating with the introduction of Fastrack B on 26 March 2006 between Dartford and Gravesend. It operates up to a ten-minute frequency. The 9.5 km long Fastrack A, funded by the private sector developers ProLogis was added to the network on 3 June 2007. It operates up to every seven minutes between Dartford and Bluewater. It is hoped that Fastrack C, a circular route in the Bluewater / Greenhithe area, and

Fastrack D, running from Bluewater to Gravesend via Northfleet, will come into service in the future.

2.45 Bexley welcomes the opportunity to work with Dartford and Greenwich Councils and TfL to explore the future scope to integrate Fastrack proposals in order to improve public transport connectivity across the Thames Gateway. Any means by which buses linking Bexley to the Bluewater shopping centre can be insulated from the effects of traffic congestion thereabouts should raise levels of punctuality along these routes to the benefits of many passengers. Furthermore, Fastrack serves Darent Hospital that is of growing importance to Bexley residents. Bexley will continue to pursue opportunities to bring Fastrack to the Borough and consider potential feasibility studies on the Howbury site.

New river crossings

2.46 The proposal for a Thames Gateway Bridge (TGB) between Beckton and Thamesmead has been dropped by the Mayor of London. It aimed to improve accessibility to and within the Thames Gateway area and support the regeneration of East London. The Mayor's Transport Strategy, however, supports improving opportunities for pedestrians and cyclists to cross the Thames in East London. In the shorter term, there is the potential to make greater use of existing passenger ferries.

Other aspirational schemes: Improved North-South Links in Bexley

2.47 An Integrated Transport Study for Bexley prepared by consultants identified that a step change in demand for public transport and commensurate reduction in traffic volumes and delay experienced in the Borough could be delivered by means of significant measures such as a direct link to the London Underground network. It also highlighted the predominantly radial nature of Bexley's rail network and the poor north-south links. The study has demonstrated that the best long-term option for the Borough involves the connection of the south of the Borough (in particular Bexleyheath) with the London Underground network. There are four such options: the extension of the DLR from Woolwich, an extension of the District Line from Barking, an extension of the Jubilee Line from North Greenwich or a separate light rail transit from Woolwich Arsenal or Abbey Wood to Bexleyheath.

Parking Provision

2.48 Off-street car parks provide convenient parking and are much more suitable for particular types of use, e.g. short stay parking in shopping centres and long stay parking around stations. They contribute to the attraction of shopping centres and minimise the impact of parking on the environment and traffic conditions. The Council controls 23 public car parks, providing over 2,800 spaces. Wherever possible, car parks associated with major developments are made available for public use with appropriate controls to make the best use of the highway network.

2.49 In Bexleyheath, a 236-space public multi-storey car park, part of a leisure development, opened in March 1998 and a 340-space car park in a nearby major retail development (known as Broadway Square) was opened in 2000. A new bus stand at Friswell Place, as part of the London Bus Priority Network, was constructed in 1997 on the site of a former 55 space public car park. The bus stand at Geddes Place was also improved with the addition of paved islands and railings for safer disembarking from buses.

2.50 The Council has introduced CCTV and other security measures into several of its car parks, especially in Bexleyheath, as part of its drive to obtain “safer car park” status for them, and to give motorists more confidence in using them.

2.51 The Council assists disabled persons holding a Blue Badge by:

- providing free parking and 4% reserved spaces in Council car parks
- creating special parking areas including a small car park for the exclusive use of disabled visitors reaching Bexleyheath by car
- having a rolling programme of improvements to car parks to provide better access for disabled people
- allowing to park free and without time limit in all permitted parking places on the Borough's roads, including parking meter bays and residents' bays.

2.52 Criteria have been adopted for the provision of on-street parking bays for disabled persons and a significant number of requests for bays are processed and met each year. The Council's parking standards are outlined in the LDF Core Strategy.



Chapter 3 Vision and Objectives

The Framework

3.1 Bexley's corporate vision and objectives are determined first by the Sustainable Community Strategy: Bexley Together and following this, by the Council's Corporate Plan 2009/12 which sets out, at the head of the Council's planning process, the key medium term priorities for 2009 to 2012.

3.2 Bexley's long-term vision set out in the Sustainable Community Strategy is to build a strong, sustainable and cohesive community, based firmly on local needs and aspirations underpinned by a clear evidence base. This vision has four components, as illustrated below:

Fig. 3.1: Bexley's Corporate Vision



3.3 The theme entitled 'Promoting economic development and the environment' includes one specifically transport-related objective:

- Reduce the Borough's carbon footprint through a range of measures including a reduction in car usage and improve public transport.

3.4 One of the priorities that received wide support during consultation by the Partnership for Bexley is to develop good transport links within the Borough, including public transport, enabling better connections to London and the wider region.

Local Area Agreement

3.5 As indicated in Chapter one (para 1.21 to 1.25), Local Area Agreements (LAAs) introduced by the previous government formed a part of the policy framework for the LIP. Bexley's Local Area Agreement (2008-2011) sets out a range of indicators which the Borough will use to measure its success in achieving the objectives set out in the Sustainable Community Strategy.

3.6 As part of the preparation for this Local Area Agreement detailed discussions have taken place with the senior lead partner for each the outcomes. They have provided initial baseline performance figures and have agreed the three-year targets. A named individual would be accountable for providing required information to the Council's Performance Team and this would be collated, verified and reported to the Partnership for Bexley on a quarterly basis.

Corporate Plan

3.7 Bexley's Mission Statement defines the type of Council it aims to be: *Listening to you, Working for you, Delivering Value – Bexley First*. The Council has used the results of various consultation exercises to set the following priorities:

- Achieving value for money;
- Improving the environment; and
- Promoting safety

3.8 The medium term transport-related objectives supporting these key priorities include:

- Securing Bexley's position in Thames Gateway, London
- Developing a transport system that reflects the Council's policies and aims
- Encouraging vibrant and viable town centres
- Enabling spatial development through delivery of the Local Development Framework
- Developing a comprehensive and integrated public transport system
- Developing and improving the existing transport infrastructure
- Developing a safer and secure transport system

Bexley's vision for transport

3.9 Within the above context, the Council's vision for transport is to achieve a good transport network that builds on the Borough's strengths, supports the local economy and strengthens local communities. The key aims therefore are:

- work towards an improved and integrated transport system including a road network which meets the needs of users to move efficiently and safely around the Borough;
- seek to achieve a more comprehensive, high-quality and integrated public transport system which better meets the economic and social needs of the Borough;
- support residents and businesses in choosing sustainable modes of travel;
- maximise the benefits of regional transport developments and support regeneration and economic development in Bexley.

Development of transport objectives and policy influences

3.10 The London Borough of Bexley's approach to transport planning and policy development is firmly based on a wider strategic context as well as local needs and characteristics. Accordingly, in determining its priorities in formulating and implementing the local transport schemes, the Council has two primary considerations: the local needs and aspirations, and the need to support the Mayor of London's goals.

National Policy Context

3.11 A particularly notable development has been the publication, in November 2008, the Transport White Paper: delivering a Sustainable Transport System (DaSTS). It outlines the previous Government's five goals for transport, focusing on the challenge of delivering strong economic growth while at the same time reducing greenhouse gas emissions. These goals are to:

- support economic growth;
- tackle climate change;
- contribute to better safety, security and health;
- promote equality of opportunity;
- improve quality of life and healthy natural environment.

3.12 The White Paper outlines the key components of the national infrastructure, discusses the difficulties of planning over the long term in the context of uncertain future demand and describes the substantial investments being made to tackle congestion and crowding on the nation's transport networks.

Despite the economic downturn, the current Government remains committed to investment in the improvement to transport infrastructure.

3.13 The Traffic Management Act 2004 (Part 2) imposes a duty on all local traffic authorities to secure the expeditious movement of traffic on their road networks, and to facilitate the expeditious movement of traffic on other authorities' networks. Authorities are required to make arrangements as they consider appropriate for planning and carrying out the action to be taken in performing the duty; part of the arrangements must be the appointment of a "Traffic Manager". Bexley has made all necessary arrangements to carry out this duty in association with the London Councils and TfL.

Regional and London-wide Policy Influence

3.14 A key issue related to the regional context for a Local Implementation Plan concerns sub-regional policies emanating from the operation of the Greater London Authority Act 1999. These include the Mayor of London's strategies for transport, spatial development (London Plan), economic development and air quality.

The Mayor of London's Transport Strategy

3.15 A particularly important issue related to the regional context for a Local Implementation Plan concerns sub-regional policies emanating from the operation of the Greater London Authority Act 1999. These include the Mayor of London's strategies for transport, spatial development (London Plan), economic development and air quality. Of these, the Spatial Development Strategy (Replacement Draft London Plan) and the Mayor's Transport Strategy have been given particular consideration in formulating the transport objectives and delivery plan of Bexley's Second LIP.

3.16 In May 2010 the Mayor's new Transport Strategy (MTS2) was published the consultation draft of which was produced at the same time as the London Plan and the Economic Development Strategy. Defining the Mayor's transport policy framework over the next 20 years, MTS2 sets out 36 'strategic policies' and 130 transport proposals, including long term ones up to the year 2031.

3.17 The Mayor's overarching vision for London to 'lead the world in its approach to tackling urban transport challenges of the 21st century', is intended to be implemented through six goals:

- support economic development and population growth;
- enhance the quality of life for all Londoners;
- improve safety and security for all Londoners;

- improve transport opportunities for all Londoners;
- reduce transport's contribution to climate change and improve its resilience; and
- support delivery of the London 2012 Olympic and Paralympic Games and its legacy.

3.18 The MTS2 also seeks to respond to all of the London Plan objectives (in particular, the one relating to accessibility and efficient transport system) as well as the national transport policy. The Strategy indicates the Mayor's welcome intention to consider network improvements 'whether funded or not'.

3.19 Following the spirit of Section 145 of the Greater London Authority Act 1999, the Council's transport goals, objectives, and programme presented in this Local Implementation Plan have been presented in the light of the goals, challenges, policies and proposals of the Transport Strategy of the Mayor of London. Table 3.1 and 3.2 demonstrate this linkage whilst the discussions in Section 3.3 provide detailed analysis.

Sub-Regional Transport Plan

3.20 A key sub-regional influence in the current LIP is expected to be the Sub-Regional Transport Plan (East). The East London sub-region consists of the London Boroughs of Barking & Dagenham, Bexley, Greenwich, Hackney, Havering, Lewisham, Newham, Redbridge and Tower Hamlets, accounting for 27% of the land in London. This sub-region has one of the greatest challenges of all the London sub-regions: to accommodate significant levels of new housing and jobs while enhancing existing neighbourhoods and creating new mixed communities.

3.21 The Sub-Regional Transport Plan: East (ESRT Plan) was published by TfL in November 2010. This followed by the publication, in February 2010, of an Interim Report on Challenges & Opportunities. The purpose of this document is to articulate the Mayor of London's Transport Strategy goals in the context of East London and also to set out more specific challenges for the region within this framework. It also outlines examples of potential schemes and policy options for addressing these challenges. In addition, the document presents detailed data and analysis, based mainly on the London Travel Demand Survey 2006/9, for the sub-region, including borough-specific information for each of the core boroughs in east London. Appropriate use of this data has been made in analysing the background information for Bexley's LIP.

3.22 The ESRT Plan identifies the following challenges and opportunities:

- improving connectivity to and within key locations to support existing communities;
- reducing the physical barrier to travel including the River Thames in east London, and improve the resilience of the transport network;
- supporting the efficient movement of goods and encouraging sustainable freight movement;
- ensuring that the benefits of funded transport investment are maximised; and
- managing highway congestion and public transport crowding and make efficient use of the transport network.

3.23 Bexley welcomes TfL's intention that the Sub-Regional Plans 'reflect local aspirations and priorities'. A key challenge in parts of the East Sub-region is the relative inadequacy of high-quality public transport infrastructure. Some boroughs, such as Bexley, are totally outside the London Underground network. This constraint needs to be addressed to support sustainable development pressures in those areas. However, whilst the ESRT Plan correctly recognises that "in order to successfully achieve the MTS objectives, sustained investment will be needed beyond the current 10-year funding settlement", it seems to concentrate on the funding commitments in TfL's Business Plan for the period up to 2017. The report does state that "it is vital that further fast, efficient and reliable transport links are provided to support the existing trip generating areas", and yet its focus appears to be on making the most of the existing transport network and maximising the benefits of the committed projects only. Unfortunately, neither TfL's Business Plan for the period up to 2017 nor the Transport Strategy Implementation Plan (short, medium and long-term) in the MTS make provision for any scheme in Bexley with the exception of Crossrail to Abbey Wood. Although the ESRT Plan accepts the 'need to review local connections' the focus should shift from a merely short-term solution to a long term vision, beyond 2017.

3.24 Regrettably, the Sub-Regional Transport Plan: East does not identify any new or significantly improved transport infrastructure that directly benefits this Borough. Contrary to expectations, the potential for extending DLR to Bexleyheath initially considered 'most promising', has been dropped. This is particularly disappointing in light of the ESRT Plans recognition of the importance of 'properly connecting' the sub-region's Opportunity Areas so 'they can play their full role'.

Local policy context

3.25 The Council's approach to an integrated transport network has been to offer the greatest choice, encourage the use of the most appropriate mode and to maximise the efficient use of existing infrastructure, while diverting traffic away from sensitive areas. This has meant investing in public transport, walking and cycling to make these modes more attractive and to reduce the reliance on the private car. It has also meant integration with land-use planning activities to ensure that development is located where there is good public transport provision. At the same time existing infrastructure must be maintained and managed to ensure that this valuable resource can be used safely and effectively. Bexley is seeking better transport links across the Borough and with the neighbouring areas. It is particularly anxious to reduce social exclusion and promote access to employment opportunities, goods and services for sections of the community. The Council has attached a high priority in securing the provision of high-quality public transport infrastructure for the Borough.

LDF Core Strategy

3.26 The Council's transport objectives are integrated with the Council's land use planning policies. A key spatial objective identified in the Submission Core Strategy of Bexley's Local Development Framework (November 2010), described earlier in Chapter 1, is to:

- Promote development that assists regeneration and renewal within the Borough and enhances the quality of life of all Bexley residents.
- Encourage development that promotes social inclusion, addresses local social and economic needs and provides a better environment.

3.27 The Core Strategy also recognises that 'there is a close relationship between travel and land use, with each influencing the other'. It therefore emphasises the need for an efficient and sustainable transport system to support and strengthen the Borough's economy and to enable better access and greater mobility. Policies CSO8 ('Achieving an integrated and sustainable transport system') and CSO9 ('Reducing the need and impact of travel') in the Core Strategy specifically deal with transport.

Bexley Cycling Strategy and Action Plan

3.28 The London Borough of Bexley was selected by TfL as one of the ten outer London Boroughs to participate in the Mayor of London's Biking Borough Initiative in 2010. As a result, the Borough has produced an innovative, evidence-based local cycling strategy and action plan. This provides a fresh basis for the development of cycling in the Borough and replaces the Cycling Action Plan included in the first LIP.

3.29 Measures identified include smarter travel initiatives, promotion and marketing, infrastructure and facilities, partnership working and organisational commitment. The core target is for a 300% increase in cycling to achieve a 3% mode share by 2020. To help achieve this, the revised action plan categorises all necessary measures for implementation, subject to availability of funding from TfL and other sources.

Bexley Investment Plan

3.30 The London Borough of Bexley has recently published a Borough Investment Plan describing the opportunities and challenges for securing investment to meet the Borough's regeneration requirements. The Council is fully committed to working with local and regional partners to promote the Borough and Thames Gateway communities as a choice location for funding and investment in areas such as housing and jobs creation, as well as seeking to realise aspirations for infrastructure investment that offer significant regeneration potential. It has been estimated that the Borough has scope for a sensitively managed release of 45 to 50 hectares of industrial land for re-zoning and redevelopment.

3.31 Working in partnership with the Invest Bexley Board which was established in 2006, as the Council's Thames Gateway Delivery Vehicle, the Council is making every efforts in taking forward the Bexley Investment Plan. So far, some £218 million of investment has been identified over the period 2009 to 2015 from a variety of sources and covering projects including housing, regeneration, education, health and transport. The Housing and Community Agency has been a key partner, investing more than £104m during the period 2008-2011.

Road Safety Plan

3.32 The Council continues to consider road safety a key priority in achieving the overall corporate goal of improving the quality of life in the Borough and aims to 'work towards Bexley being the safest borough in London'. In addition to supplementing the Council's strategy to achieve a sustainable transport system in the Borough, road safety work also contributes to the corporate aims in Bexley's Community Strategy to build a strong, sustainable and cohesive community.

3.33 To this end, Bexley produces annually a Road Safety Plan. Whilst national guidance on new policies and targets is awaited, the Road Safety Plan 2009/10 set out the following three aims, which the Council expects to meet:

- To complete enough safety engineering and School Travel Plan schemes in 2009/10 designed to save at least 15 casualties each year on Borough roads; and

- To provide a continuing programme of road safety education, training and publicity designed to improve road users' attitudes and behaviour.
- Organising cyclist training courses, focusing on children who will use their bicycles as a form of transport.

Sustainable Modes of Travel Strategy

3.34 The Education and Inspections Act 2006 placed a general duty on Local Authorities to promote the use of sustainable travel and transport for journeys to and from school, with a view to improving the physical well-being of those who use them and the environmental well-being of the wider area. One of the elements of this duty is to publish a Sustainable Modes of Travel Strategy. This strategy details the current infrastructure and activities which support sustainable school travel in Bexley. It identifies how the Council and its partnership groups plan to develop this infrastructure and tackle any identified barriers to sustainable travel in the future. The overall aim of the strategy is to encourage safe and sustainable long-term modal shift away from unshared private cars on all journeys to, from and between schools. The main method for helping achieve this aim is through the Borough's School Travel Plan Programme.

Air Quality Action Plan

3.35 Transport is the single largest contributor to air pollution in London. The Mayors' Air Quality Strategy has therefore suggested a coordinated approach between TfL, the London boroughs and the Highways Agency to reduce emissions on 'those roads predicted to exceed the national air quality objectives'. Within this context and following an updated review and assessment of local air quality, the entire Borough was declared an Air Quality Management Area in 2007, highlighting particulates and nitrogen dioxide as the objectives not being met. The Council has to revise the action plan to include the measures to be taken to deal with the identified areas of unsatisfactory air quality, mainly linked to pollution associated with vehicle emissions from the major traffic routes.

3.36 At present, Bexley carries out air quality monitoring at three permanent monitoring stations. Without further external funding this level of monitoring will not be sustainable. There will be limited monitoring via the network of 200 plus nitrogen dioxide diffusion tube monitors located throughout the Borough. The Council supports the introduction of the London-wide co-ordinated LEZ scheme introduced by the Mayor of London early in 2008, intended to stimulate the uptake of 'cleaner' vehicle technology and to cut harmful emissions from the most polluting lorries, coaches and buses.

Local Problems, Challenges and Opportunities

3.37 The analyses presented in Chapter 1 and 2 on the London Borough of Bexley's socio-economic and transport contexts gave a broad indication of the problems, challenges and opportunities facing the Borough. Paragraphs 3.1 to 3.36 discussed the policy frameworks and the overall process of development of the transport objectives. The following paragraphs explain these issues in some detail and in particular, in the context of the Mayor of London's Transport Strategy and other relevant policy documents and then identify the Borough's specific transport objectives that are consistent with the MTS and the Local Development Framework.

3.38 As in the first LIP document, the London Borough of Bexley's transport objectives and policies as well as the LIP proposals specifically address and support the cross-cutting goals of MTS (mentioned earlier). In accordance with TfL's guidance on LIP2, the discussions revolve round each of the six goals of MTS and the related challenges categorised in that document.

Supporting economic development and population growth

MTS Challenge: Support population and economic growth

3.39 As indicated in Chapter 1, over the next ten years, the population is expected to continue to grow. By 2021, there are expected to be around 230,000 people living in Bexley. Being located at the heart of the Thames Gateway, the Borough has considerable growth potential and has sizeable employment locations. These are the Thames Gateway Opportunity Area in the north of the Borough, the district centres of Crayford, Sidcup and Welling and in particular, the Borough's strategic town centre Bexleyheath.

3.40 Bexley's Submission Core Strategy for the Local Development Framework (November 2010) gives a clear indication of sustainable growth in the Borough. Whilst the opportunities for new, large-scale development is limited, renewal of existing sites and consolidation of employment land has represented opportunities for redevelopment to other uses, such as housing. At the same time the nature of employment in the Borough is changing, with new sectors emerging or growing. Significant employment growth will be experienced, but the pattern of job distribution will be different. At present Bexley has an economic activity rate of 80%, higher than London's 75% and London Thames Gateway's 72%.

3.41 Housing development represents a fundamental drive for change in the Borough. It is central to achieving both the amount and distribution of growth as set out in the Core Strategy vision, as well as the aspiration of many of the Core Strategy objectives.

3.42 These significant development pressures will have to be addressed with substantial improvement and enhancement of a sustainable transport system, particularly the currently inadequate public transport facilities. This is consistent with the Mayor's Transport Strategy.

3.43 TfL's Business Plan for the period 2010-2017 includes only one major transport infrastructure that benefits Bexley. This is Crossrail connection to the Borough's boundary at Abbey Wood, due to be completed in 2017. However, significant regeneration potential in the north of the Borough will be facing serious constraints in terms of accessibility and connectivity. This is because the much-needed extension of Crossrail to Ebbsfleet and Gravesend is not included in the current plan and the abandonment of the proposal for Greenwich Waterfront Transit has damaged the Borough's prospect for the Bexley Transit Link.

3.44 Furthermore, Abbey Wood has poor public transport accessibility level from the south of the Borough. Therefore, in recognition for improved north-south movement in the Borough, arising in part from the poor coverage of high-quality rail services and continuing problems of traffic congestion, an important challenge for Bexley is to explore other avenues for the delivery of efficient, reliable, fast and sustainable transport modes that will reduce car use and improve connectivity within the Borough and other locations, such as the Docklands, City and West End of London. A consultancy study (Colin Buchanan: *Bexley Integrated Transport Study*, August 2008) commissioned recently by Bexley has demonstrated that north-south travel demand in the Borough will clearly justify the provision of high-quality links between future Crossrail connection at Abbey Wood and the southern part of the Borough, particularly the strategic town centre of Bexleyheath. Demand arising from Bexley's preferred and evidence-based spatial strategy which proposes to enhance existing town centres and to develop the Thames Gateway Opportunity Area in the north of the Borough will typically benefit from such a transport provision.

Bexley objective: In light of the above, a challenge for Bexley is to improve and enhance public transport capacity in the Borough while maximising the current rate of utilisation and opportunities for sustainable travel. Accordingly, the Borough will work towards an improved and integrated transport system that supports regeneration and economic development as well as supports growth needs in the Borough's spatial development strategy.

MTS Challenge: Improving transport connectivity

3.45 Chapter 2 provides an overview of the current transport infrastructure of Bexley. Whilst the Borough is generally well-served by bus, it is entirely outside the London Underground as well as DLR network. The three South Eastern rail lines provide east-west services to the Borough and there are no north-south lines, in addition to the absence of north-south lines by bus. As recognised in the Challenges and Opportunities Report of the East Sub-Regional Transport Plan of TfL, 'connectivity to Bexleyheath (town centre) remains a significant issue'. The report also accepts that investments for improved connections to the town centre will be needed.

3.46 With TfL's support, Bexley has commenced work on a major scheme to improve transport and public realm improvement in Bexleyheath (*Bexleyheath Town Centre Revitalisation: Conceptual Master Plan and Outline Design, April 2011*). This will also facilitate increased and safer walking and cycling.

3.47 However, in the long run, north-south links and connectivity to Bexleyheath town centre will require high-quality public transport infrastructure the delivery of which is outside the scope of TfL's current Business Plan. This requirement is consistent with the objectives to revitalise the town centre and secure value for money for the investment in the ongoing major scheme. The Council's long-term aspiration is to connect Bexleyheath with London's Underground network. This issue has been highlighted in the Borough's representation to the Outer London Commission.

Bexley objective: Bexley's challenge is to improve and enhance access to central London employment opportunities and to all parts of the Borough and in particular, its strategic town centre. Therefore, the Borough will aim to secure a more comprehensive, high-quality and integrated public transport system and maximise benefits of regional transport developments.

MTS Challenge: Delivering an efficient and effective transport system for people and goods including maintenance

3.48 At present, the national rail services and stations in the Borough are very important in providing for the travel needs of the local community. The Council wishes to see rail services improved in line with the South London Metro concept to provide greater frequency as well as capacity and to offer as wide a range of destinations as possible.

3.49 It has been noted earlier that with no London Underground tube service and only east-west railway lines, Bexley residents depend heavily on buses to meet local transport needs, especially for north-

south journeys. An important element of Bexley's public transport strategy therefore relates to the Council's intention to achieve a comprehensive and improved bus network and operation in the Borough, including the need to serve town centres, other centres of attraction (such as leisure and cultural facilities), and the railway stations as interchanges.

3.50 Bexley has a programme of works for bus priority and improvement for bus passengers. The Council wishes to install bus priority, bus stop improvements and improved passenger facilities on all appropriate roads that carry buses. It is keen to co-operate with TfL and bus operators to review and improve the performance and reliability of individual bus routes in the Borough. Bexley continues to improve accessibility to bus services in the Borough by implementing clearways at every stop, providing adequate height kerbs and improving passengers' routes to stops as well as the stop environment itself.

3.51 The safety and personal security on routes to and from public transport stops or interchanges are considered via programmes for walking, station accessibility, bus stop accessibility, lighting and CCTV. The CCTV programme is intended to cover walking routes and car parks in town centres.

3.52 Good interchange is essential to maximise the use and benefits of the public transport network and to ensure that passengers have as seamless a journey as possible. This requires frequent, convenient and co-ordinated services, good information and high quality facilities. Interchange is particularly important at Bexleyheath, Erith and Sidcup town centres where many bus routes meet and at rail stations at Sidcup, Bexleyheath, Barnehurst, Welling, Abbey Wood and Albany Park. Bexley is also planning to provide travel information (train and bus arrival and departure times in real time) in town centres including the possibility of providing information kiosks.

3.53 Bexley will continue to work with TfL and London Councils to raise awareness of the local taxi firms regarding the travel needs of disabled people.

3.54 The Council recognises that road traffic and increasing congestion can have a detrimental impact on the quality of life in the Borough and London as a whole. Traffic flows in the Borough have increased and development pressures in future in the Thames Gateway region will exacerbate this phenomenon. Although any target for reduction will need to be realistic and appropriate to the particular circumstances facing the Borough, a number of measures will be required to induce modal shift and to have a positive impact on reducing traffic volumes. These include improving public transport facilities and introduction of travel demand measures pursued by the Council.

Bexley encourages proposals that support the carriage of freight by rail or river transport. It will seek to preserve existing rail and water freight facilities from redevelopment for other uses where there are realistic prospects of future use of the facilities.

3.55 The London Borough of Bexley has approximately 1800 roads measuring a total of over 500km and has the second largest Principal Road network in London. Bexley has adopted a strategy to improve the condition of the principal road network in order to meet the Government's target of ensuring that not more than 10% of the highway network in the Borough is in a critical condition. Visual condition surveys have been conducted to prioritise schemes and then review them against other factors such as bus routes, regeneration and other road schemes. Each year the three-year programme of work is updated. Street lighting columns are checked as part of the routine maintenance regime, with one-third inspected each year. Highway structures are also inspected in accordance with the latest custom and practice allowing maintenance priorities to be established. The condition of the network is recorded each year to help establish if the resources being provided are sufficient to meet the annual deterioration.

Bexley objective: Bexley's challenge is to overcome current constraints of the transport network and strive to deliver to meet the Borough's needs and aspirations. In doing so, the Borough's objective is to improve and maintain the existing transport infrastructure and support residents, visitors and businesses in choosing sustainable modes of travel.

Summary of delivery actions: Supporting economic development and population growth

In addressing this goal in the Mayor's Transport Strategy, Bexley intends to:

- (1) Undertake, with TfL's support, transport and public realm improvements to revitalise the Borough's town centres;
- (2) Work with TfL in providing better accessibility in the deprived north of the Borough;
- (3) Continue to lobby for the extension of Crossrail from Abbey Wood to Ebbsfleet;
- (4) Ensure transport implications of the Borough's LDF Core Strategy are adequately addressed;
- (5) Maintain a robust Asset Management Plan and continue to improve the condition of both the principal roads and Borough roads network in Bexley.

Enhancing the quality of life of all Londoners

MTS Challenge: Improving journey experience

3.56 Bexley agrees with the MTS that making the modes of travel efficient, reliable, comfortable and easier to use will make the journey experience less stressful and consequently improve health, wellbeing and quality of life of all the residents, visitors and business providers of the Borough.

3.57 Bexley maintains regular liaison with all public transport operators with a view to identifying and overcoming challenges and problems concerning the Borough's travel experience, including journey time reliability on all bus routes. Within the framework of the Mayor's 'Better Streets' theme, comprehensive major schemes are being pursued in the town centres focusing on clutter-free better street environment, promoting safe pedestrian movements and providing better information on the choice of modes of travel. The Borough has a Network Management Plan under the Traffic Management Act 2004 that is aimed to tackle the problems of disruption on traffic flows and consequent road congestion. Travel demand management measures are also being pursued.

Bexley objective: Bexley's challenge is to offer satisfactory travel opportunities to all.. In this regard, the Borough's objective is to improve and maintain the condition as well as operation of the existing transport infrastructure.

MTS Challenge: Enhancing the built and natural environment

3.58 Bexley shares the Mayor's concern that transport's contribution to the character of the built environment needs to be addressed carefully. Bexley has a wealth of natural and physical resources, which together give the Borough its distinctive feature. The spatial objectives in Bexley's LDF Core Strategy pay due regard to the protection and improvement of the natural environment, making the Borough a healthier place to live, maintaining and developing the natural environment, protecting open spaces and promoting their value, providing for bio-diversity and conserving Bexley's built and natural heritage.

3.59 In some parts of the Borough, there is a need to provide transport facilities to safeguard and improve leisure facilities as well as protect wildlife. Some examples are the River Cray Walkway and pedestrian links and the Belvedere Link Road. The latter scheme has incorporated measures to improve wildlife and natural habitats, environments for protected species like water voles. The overall impact on the natural environment and ecology of the area has been of paramount concern

for the scheme and has involved extensive liaison with all stakeholder including the Environment Agency.

3.60 The ongoing public realm improvement schemes at Sidcup and Bexleyheath are aimed to improve the overall quality of street scene.

MTS Challenge: Improving air quality

3.61 Bexley recognises the need to adopt a coordinated approach between TfL, the London boroughs and Highways Agency to reduce emissions in those roads predicted to exceed the national air quality objectives. Within this context, air quality management areas (AQMA) have been designated in the Borough to include locations where air quality objectives are unlikely to be achieved. Manor Road, Erith was designated as the first AQMA, highlighting particulates as the major problem. The Stage 3 Air Quality and Assessment has been published and the whole of the Borough has now been designated as an AQMA. The Council has also prepared action plans describing the measures that are to be taken to deal with the identified areas of unsatisfactory air quality, linked to pollution associated with vehicle emissions from the major traffic routes.

3.62 Bexley will continue to raise awareness on air quality and encourage the use of zero emission forms of transport, such as walking and cycling as well as cleaner vehicles.

MTS Challenge: Improving noise impacts

3.63 The measures to deal with transport related ambient noise can be administered locally by (a) securing good, noise reducing surfaces on the Borough's own maintained roads, (b) better planning and design of housing, (c) promoting and using quieter vehicles (hybrid and electric), and (d) considering the issue of noise reduction in traffic management schemes.

MTS Challenge: Improving health impacts

3.64 One of the visions of the London Borough of Bexley's Sustainable Community Strategy relates to developing healthier communities for adults. A spatial objective in Bexley's LDF Core Strategy is to make the Borough a healthier place by working in partnership to provide access to health services, provide opportunities for sport and physical activity and promote development that encourages healthy lifestyles. With regard to transport's contribution towards this objective, the Borough's efforts relate to reduction of vehicular emission mentioned earlier, as well as the promotion of sustainable and physically active modes of transport. Bexley has accepted TfL's invitation to become one of the ten outer London 'Biking Boroughs' aimed to promote cycling as a serious mode of transport that also would result in positive health benefits.

3.65 The Bexleyheath Town Centre Revitalisation Scheme (formerly called Area-Based Scheme) includes proposals to improve and enhance walking facilities. The Council's successive Road Safety Plans have successfully delivered the reduction of road safety collisions. The School Travel Plans help motivating school children to walking and cycling rather than being driven in private cars. In addition to addressing air pollutant emissions, this habit also provides an opportunity to overcome the phenomenon of childhood obesity.

Summary of delivery actions: Improving the quality of life for all Londoners

In addressing this goal in the Mayor's Transport Strategy, Bexley intends to :

- (6) Implement the air quality action plans;
- (7) Take forward the Biking Borough initiative, as funds permit;
- (8) Improve the walkability of town centres and access to local services;
- (9) Continue the education and training programmes in the use of smarter travel modes;
- (10) Develop an area-based travel plan for Bexleyheath Town Centre;
- (11) Progressively implement the Borough's Sustainable Modes of Travel Strategy.

Improving the safety and security of all Londoners

MTS Challenge: Reducing crime, fear of crime and antisocial behaviour

3.66 One of the visions of the London Borough of Bexley's Sustainable Community Strategy is to 'build safer and stronger communities'. Bexley's Community Safety Plan 2008-2011 produced by Bexley Community Safety Partnership aims to make the Borough 'the safest borough in London by reducing crime, the fear of crime, tackling anti-social behaviour and addressing substance misuse'. Resources allocated to deliver the strategic priorities of this plan include four Safer Transport Teams. One of the priorities is to maintain a high quality environment, ensuring Bexley is a clean and attractive borough that promotes the feeling of safety among its residents. Reducing fear of crime and anti-social behaviour on the Borough's streets are also considered priorities. Bexley's Local Area Agreement includes a target in reducing the people's perception of anti-social behaviour on the Borough's streets from 44% in 2006 to 39% in 2010-11.

3.67 Bexleyheath town centre (in particular, Market Place) was identified as a hotspot of anti-social behaviour, mainly from teenagers and school children. This has been tackled by setting up dedicated police patrols.

3.68 The Bexleyheath Town Centre Revitalisation Scheme (now in the detailed design stage) has objectives to create a pleasant and safe environment in the town centre and proposals include design of public spaces, provision of better street lighting, taxi ranks, a public transport information booth that could also double up as a 'safe haven' including specific monitoring by CCTV linked to the Bexleyheath CCTV control room and with the phone facility also being available for emergency service calls.

MTS Challenge: Improving road safety

3.69 Bexley continues to consider road safety a key priority in achieving the overall corporate goal of improving the quality of life in the Borough and aims to work towards Bexley being 'the safest borough in London'. In this regard the Council's policy aim is:

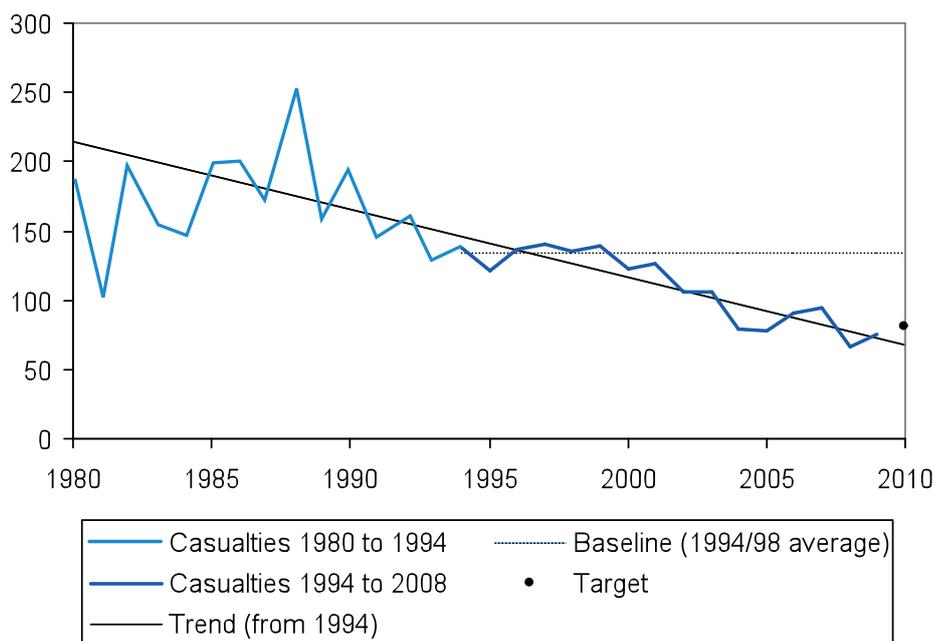
"improving road safety and stabilising traffic levels by (a) promoting and improving road safety for all pedestrians and road users and (b) campaigning to reduce car use by encouraging walking, cycling, car sharing and the use of public transport".

3.70 Bexley's road safety and traffic management measures seek to improve the environment for pedestrians and reduce the risk of accidents to pedestrians and cyclists and help secure a continued reduction in road casualties in line with both the national and Mayoral policies. Bexley has a sustained record of high achievement in road safety and is one of the boroughs where the number of casualties each year has fallen the most.

3.71 The trends in the number of all ages KSI (killed or seriously injured) on the Borough's roads are illustrated in Fig3.2 and Table 3.1 below summarises the Council's progress in casualty reduction in meeting targets:



Fig. 3.2: Casualty Reduction Target 2010
KSI (all ages) on Borough roads



MTS Challenge: Improving public transport safety

3.72 Bexley Community Safety Partnership is committed to the reduction in crime on the transport network throughout the Borough. A sub-group of the partnership considers Safer Travel and is chaired by the Metropolitan Police and attended by British Transport Police and TfL. Working with local transport providers, issues around offending linked to bus and train corridors are also key considerations for the Partnership when analysing crime and disorder on public transport.

3.73 Bexley will:

- continue to review late night travel options to raise awareness of potential risks to late-night travellers, especially young people leaving the Broadway bars and pursue solutions to improve safety;

- address disorder issues around loading of buses, principally on the Broadway, at the end of the school day;
- continue to take measures to deal with the issue of criminal damage on buses;
- work with train operators to ensure (e.g. through CCTV and better lighting installation) the environment around the Borough's stations support the continued reduction in the fear of crime for people using these facilities;
- continue to review the impact of transport-related street furniture (e.g. bus shelters and stops) impact on crime and disorder.

Table 3.1: Progress in casualty reduction on Borough roads (excluding TLRN)

User group	Casualty numbers			Percentage change in 2009 over	
	1994-98 average	2008	2009	2008	1994/98 average
KSI (all ages)*	134	73	75	2%	-44%
KSI Children (under 16 years)*	23	14	14	nil	-43%
Slight injuries*	734	559	498	-11%	-32%
KSI pedestrians**	34	20	21	5%	-38%
KSI pedal cyclists**	9	3	6	100%	-33%
KSI powered two-wheelers**	14	14	13	-7%	-7%

* National casualty reduction targets, set by the Government in 2000

** The Mayor of London's extra casualty reduction targets

Summary of delivery actions: Improving the safety and security of all Londoners

In addressing this goal in the Mayor's Transport Strategy, Bexley intends to:

- (12) Deliver a programme of targeted Road Safety Education, Training and Publicity initiatives and campaigns.
- (13) Implement road safety engineering measures designed to save at least 15 casualties per year on Borough roads, incorporating cycle and pedestrian safety measures into these improvements.
- (14) Secure a 13% short term reduction by 2013 and 33% long-term reduction by 2020 in the number of people killed or seriously injured in road crashes based upon 2004 to 2008 casualty levels.
- (15) Take appropriate measures to reduce fear of crime and anti-social behaviour on public transport modes and terminus in consultation with local communities.
- (16) Ensure that safety and security considerations are incorporated into the planning and design of transport schemes.

Improving transport opportunities for all Londoners

MTS Challenge: Improving accessibility

3.74 Bexley strongly supports the Mayor's policy to improve the physical accessibility of the transport system, including streets, bus stops, stations and vehicles.

3.75 The Council maintains close liaison with Dial-a-Ride and Shopmobility services through its town centre management activities. Inspire Community Trust works in partnership with the Council and Bexley Association for Disabled People to provide a shopmobility scheme in Bexleyheath town centre.

3.76 Accessible transport is an important part of Bexley's social inclusion agenda. At present, all buses operating in the Borough are wheelchair accessible. However, some public transport services within the Borough are not accessible to people with a disability, particularly those in a wheelchair. Mobility Buses and Dial-a-Ride were the subjects of ongoing complaints about frequency and availability. Bexley Accessible Transport now provides services for TfL to replace Mobility Buses. In particular, many of the railway stations in the Borough lack facilities for the mobility impaired people.

MTS Challenge: Supporting regeneration and tackling deprivation

3.77 The Thames Gateway (London) sub-region has been recognised by both the Government and the Mayor of London as one of the key regeneration areas. The London Borough of Bexley lies in a very important location in the Thames Gateway, acting as the link between the London and Kent areas of the Gateway on the south side of the River Thames. Significantly for Bexley, Belvedere-Erith has been identified as an Opportunity Area by CLG.

3.78 As explained in Chapter One, there are parts of the Borough, particularly in the north, that experience high levels of social deprivation and the Council therefore intends to retain and generate employment there. According to the 2004 Index of Multiple Deprivation published by the then Office of the Deputy Prime Minister, 13 of Bexley's 146 Super Output Areas fall within the worst 25% most deprived areas in England.

3.79 Bexley has made significant contributions to attracting new investment, developing local skills, establishing new businesses and securing local employment as well as improving infrastructure in the deprived north of the Borough. The Council has formulated an Invest Bexley Regeneration Framework for the years 2007 to 2016. This focuses, among other things, on the parts of the Borough experience multiple deprivation where intervention is needed to break a cycle of decline and create choice and opportunity. These are Bexley Riverside, including Erith, Crayford, Thamesmead and Abbey Wood, Belvedere, and Slade Green.

3.80 Inadequate public transport infrastructure is a particular problem in terms of regeneration. The PTAL score is low in most parts of the Borough, particularly in regeneration areas, and so a priority in the Bexley's LIP is to implement a number of transport schemes that assist regeneration and tackle deprivation. Unsurprisingly, one of the seven key priorities of the Invest Bexley Board is to secure new public transport links.

Summary of delivery actions: Improving transport opportunities for all Londoners

In addressing this goal in the Mayor's Transport Strategy, Bexley intends to:

- (17) Press for the provision of high-quality public transport facilities
- (18) Treat the Borough's principal transport corridors with a holistic approach with regard to both transport and public realm improvement;
- (19) Continue the programme of local area accessibility;
- (20) Undertake station access improvement schemes;
- (21) Overcome a key regeneration challenge, particularly in the north of the Borough, in terms of better provision of transport infrastructure.

Reducing transport’s contribution to climate change and improving resilience

MTS Challenge: Reducing CO₂ emissions

3.81 In line with a global phenomenon, Bexley will also be affected by a changing climate. The predictions indicate that weather extremes will place a significant cost on local infrastructure, homes, businesses, even the Borough’s health and environment. The location of Bexley, bordering the Thames, means that there are risks associated with flooding from increased rainfall and flash storms. The increased flooding will test flood defences and may cause serious property damage; transport and communications will also be affected by the closure of roads and rail networks. In response to this challenge, and to help Bexley prepare for an uncertain climatic future, a Climate Change Strategy has been prepared, which aims to address the causes and effects of climate change and take action at a local level that contributes to national and international targets.

3.82 Data provided by DEFRA provides an indication of the main contributors to climate change based on 2005 data. The results of CO₂ emissions for Bexley will be similar to many other areas within the UK and is predominantly how society uses its energy resource today. Transport contributes to 28% of CO₂ emissions

3.84 Road transport is both a major contributor to the carbon footprint of the Borough and a major source of air pollution. The sector accounts for 17% of the total energy consumed in the Borough. Expressed as an average, this equates to each person using half a tonne of road fuel each year, emitting 0.75 tonnes of CO₂ per person; in total 168,000 tonnes of CO₂. Car ownership in Bexley is relatively high compared to other London

Boroughs. This is partly due to the inadequate public transport infrastructure that often fails to provide a viable alternative to the car. The car is therefore the main mode of transport for getting to work. However, about a quarter (24%) of households do not have access to a car.

3.85 The Council supports a positive move towards a sustainable transport system, as identified through the policies within the Local Implementation Plan. These centre on the provision of an integrated transport network offering choice and encouraging the use of the most appropriate mode to make the best use of the existing network. The policies support investment in public transport, walking and cycling to increase the attractiveness of sustainable transport and to reduce reliance on the private car. Working with TfL, the Council aims to drive forward improvements to public transport in order to promote accessible transport and social inclusion thereby stimulating the opportunities for employment, leisure facilities and services within the Borough and the region.

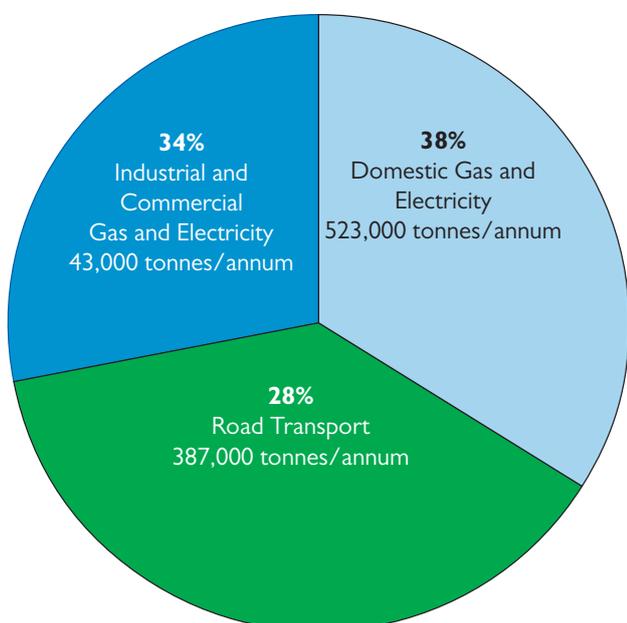
3.86 The Council supports the introduction of the London-wide coordinated LEZ scheme introduced by the Mayor of London in 2008, intended to stimulate the uptake of ‘cleaner’ vehicle technology and to cut harmful emissions from the most polluting lorries, coaches and buses. Bexley appreciates that the biggest opportunity for emissions reductions in this sector is from uptake of lower-carbon vehicles and fuels, which alone could cut transport emissions by up to 4-5 million tonnes. It is also recognized that successful promotion of travel plans and travel awareness campaigns will help reduce car use and consequent pollution. To this end, the Council also intends to promote the use of the river for both passenger and freight movements.

MTS Challenge: Adapting to climate change

3.87 The Mayor’s Transport Strategy recognises that some degree of climate change is inevitable. Bexley’s transport infrastructure will therefore need to be rendered more resilient to extreme weather conditions both in the winter and summer months. The Borough’s highway maintenance and road safety programmes are guided by appropriate policies and practices in this regard.

3.88 Within this context, the key local actions in response to climate change related to transport are indicated in the box below entitled ‘Summary of Delivery Actions’.

Fig. 3.3: Bexley’s CO₂ emissions in 2005



Summary of delivery actions: Reducing transport's contribution to climate change and improving resilience

In addressing this goal in the Mayor's Transport Strategy, Bexley intends to:

- (22) Encourage the use and provision of public transport, walking and cycling.
- (23) Encourage the use of sustainable, low emission vehicles by trialling bio fuels in Bexley's own vehicle fleet and generally promote the use of cleaner vehicles and alternative fuel vehicles.
- (24) When feasible, upgrade the contracted municipal vehicles to hybrid and electric models.
- (25) Consider establishing electric charging points at appropriate locations in the Borough.
- (26) Assess the effects of new sources of air pollution introduced by developments in the Borough and use planning conditions to protect local air quality where necessary.
- (27) Work with TfL to improve traffic flow and reduce congestion.

Supporting delivery of the London 2012 Olympic and Paralympic Games and its legacy

3.89 The London Borough of Bexley supports the MTS Policy 26 to ensure delivery and successful operation of the committed transport infrastructure required for the London 2012 Olympic Games. However, Bexley is not one of the five host boroughs and therefore no specific objective or delivery action in this regard needed to be formulated in its LIP.

Summary of Borough Transport Objectives and consistency with MTS

3.90 The discussions above have explained how Bexley proposes to address each of the goals and challenges of the Mayor's Transport Strategy (MTS) and how this informed the formulation of the Borough's transport objectives for the Second Local Implementation Plan. These transport objectives are summarised in Table 3.3 whilst Table 3.2 lists Bexley's own transport goals, challenges¹ and outcomes.

3.91 Table 3.2 follows the structure of Figure 3 of the MTS (page 37). Bexley's own goals are informed not only by the MTS goals, but also by its corporate vision and strategies discussed in this chapter. For each of these goals, the Borough has identified a number of challenges or objectives. The resulting outcomes shown in column 3 of this table will inform the Delivery Plan.

¹ The words 'challenges' and 'objectives' are considered interchangeable.

3.92 Table 3.3 demonstrates how Bexley's transport objectives are compatible with MTS goals as well as the Borough's Sustainable Strategy goals and the Delivery Actions identified against each of the MTS challenges.

3.93 The strategic interplay of institutional responsibilities, plans and delivery mechanisms is illustrated in Figure 3.4..

3.94 In summary, the Council's approach to transport planning and policy development can be clearly seen to be based on both a wider strategic context and local needs. Careful consideration has been given to the interplay of strategic issues and responsibilities shared between central, regional/sub-regional and local governments (Fig. 3.1). Changes in national and regional policies have led the Council to considerably modify its approach from attempting to meet traffic growth, to one of managing and containing traffic demands, improving public transport and concentrating on improving accessibility for both people and goods.

3.95 The Mayor of London's Transport Strategy (MTS) and the London Plan are given particular consideration in formulating the Council's own strategies. As the LIP is primarily intended to implement the Mayor's Transport Strategy, fundamental consideration is needed to ensure consistency between the Council's overall vision for Bexley and national and regional policy frameworks. To that end, the Council's vision for transport is to achieve a network that builds on the Borough's strengths, supports the local economy and strengthens local communities. As demonstrated in Tables 3.2 and 3.3, setting objectives of an integrated transport strategy therefore involves the Council's corporate objectives and targets, and conformity with the London Mayor's stated priorities. It is also evident that the Council's transport policies and LIP proposals address and support the five cross cutting goals identified by TfL.

3.96 In essence, the Borough's transport objectives are set in a long-term framework, following the 20-year timescale of the MTS. Some of these objectives relate to ongoing programmes of work and are already being achieved. Some of the outcomes are required to be delivered in the short to medium term. These shorter term projects are identified in the Delivery Plan.. In particular, the Council's need and aspiration to improve north-south transport links by means of a high-quality public transport system including a suitable connection with the London Underground network constitute a long-term objective.

3.97 In addition to the MTS goals and challenges, the key local issues that have informed the formulation of Bexley's transport objectives for the LIP are:

- the need for regeneration and partnership working
- integration with corporate objectives and land use planning
- a continued move towards a sustainable transport system
- Borough-specific critical requirements, such as the need for a high-quality public transport system.

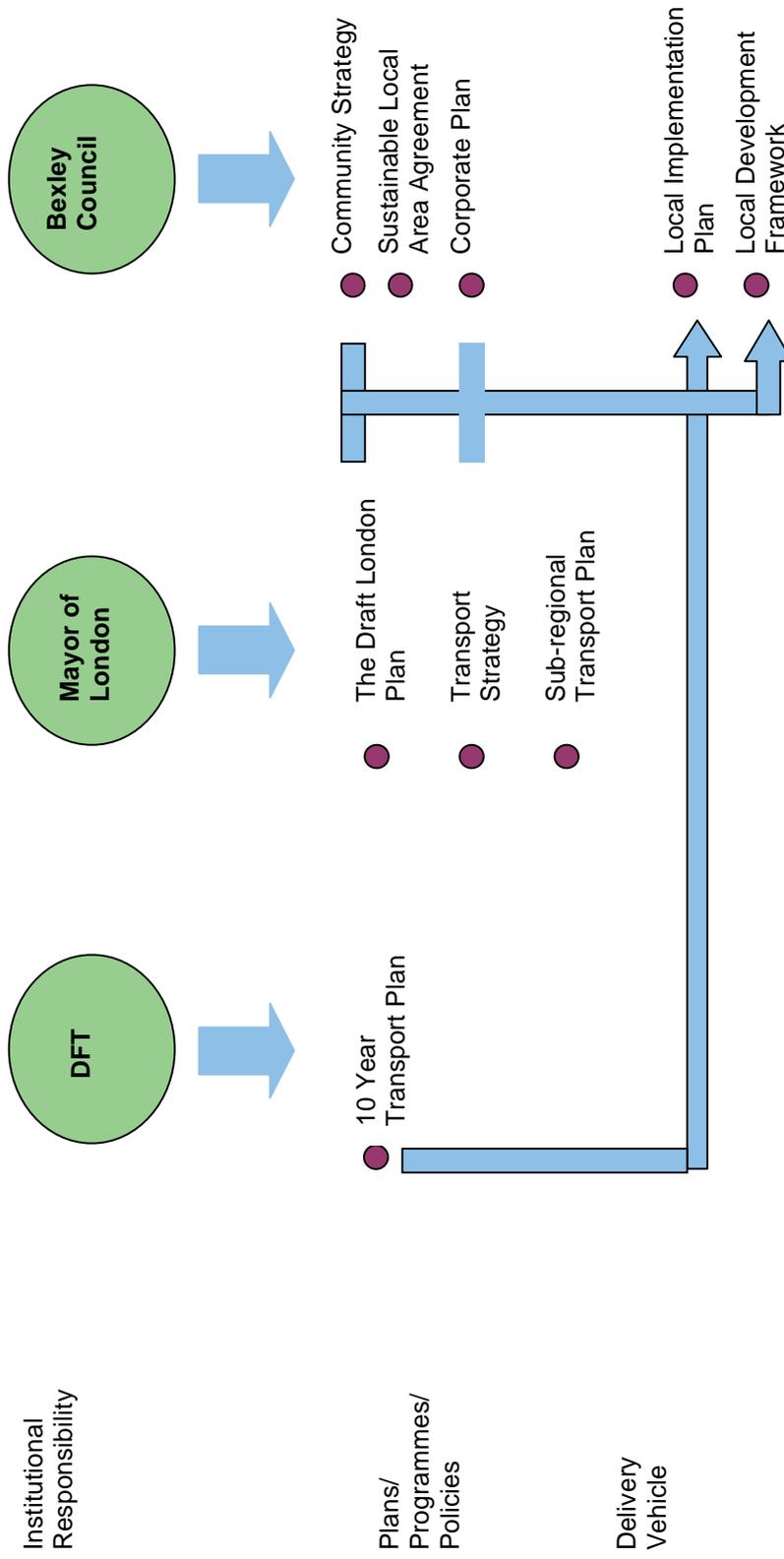
Table 3.2: Bexley's Transport Goals, Challenges and Outcomes

Goals	Challenges/Objectives	Outcomes
Support economic regeneration and development pressures	<ul style="list-style-type: none"> ■ Work towards an improved transport systems that support regeneration and economic development in the Borough ■ Support growth needs in the Borough's spatial development strategy 	<ul style="list-style-type: none"> ■ Encouraging vibrant and viable town centres ■ Providing better accessibility in the deprived north of the Borough
Improve and enhance better connections to London and the wider region	<ul style="list-style-type: none"> ■ Secure a more comprehensive, high-quality and integrated public transport system ■ Maximise benefits of regional transport developments 	<ul style="list-style-type: none"> ■ Securing the Borough's connection to the London Underground network
Develop efficient and sustainable transport links within the Borough	<ul style="list-style-type: none"> ■ Optimise the efficiency of the existing transport networks and improve and maintain the existing transport infrastructure ■ Support residents, visitors and businesses in choosing sustainable modes of travel 	<ul style="list-style-type: none"> ■ Improving north-south links in the Borough ■ Improving cycling and walking facilities ■ Developing area-based and workplace travel plans ■ Increasing sustainable travel capacity and opportunities for trips to/ from key growth and employment centres within the borough
Develop a safer and secure transport system	<ul style="list-style-type: none"> ■ Promote the safety and security of road and transport users 	<ul style="list-style-type: none"> ■ Reducing road traffic collisions ■ Securing public realm improvements in town centres
Improve accessibility and social inclusion for all in the Borough	<ul style="list-style-type: none"> ■ Improve and enhance access to jobs, services, health & leisure facilities ■ Make transport system accessible to all 	
Reduce the Borough's contribution to climate change	<ul style="list-style-type: none"> ■ Reduce the Borough's carbon footprint from transport 	<ul style="list-style-type: none"> ■ Improving cycling and walking facilities ■ Encouraging more alternative fuel vehicles in service ■ Installing electric vehicle charging points ■ Encouraging more public transport usage ■ Reducing the need for travel
Improve the quality of life of all Borough residents	<ul style="list-style-type: none"> ■ Improve and enhance access to jobs, services, health & leisure facilities ■ Make transport system accessible to all ■ Reduce the Borough's carbon footprint from transport 	

Table 3.3: Bexley's LIP Objectives: Consistency with other issues

Bexley's LIP Objectives	MTS Goals				S RTP Challenges & Opportunities						Sustainable Community Strategy Goal				Delivery Actions
	Econ Devt and Population Growth	Quality of Life	Safety and Security	Opportunities for all	Climate change and resilience	Improving connectivity to and within key locations to support existing communities, growth & change and improved environment.	Reducing physical barrier to travel and improve resistance of the transport network.	Supporting efficient and sustainable movement of goods	Maximising the benefits of funded transport investment	Managing highway congestion and public transport crowding.	Promoting economic development and the environment	Building safer and stronger communities	Developing healthier communities for adults	Developing services for children and young people	
1. Work towards an improved transport systems that support regeneration and economic development in the Borough	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	1,2,3,4,5,21	
2. Support growth needs in the Borough's spatial development strategy	✓				✓			✓			✓			1,4	
3. Secure a more comprehensive, high-quality and integrated public transport system to overcome the current constraints	✓	✓		✓	✓	✓	✓		✓	✓		✓	✓	3,17,21	
4. Maximise benefits of regional transport developments to fully utilise funded investment for improving the Borough's connectivity	✓	✓		✓	✓	✓	✓	✓	✓	✓		✓		2,3,17	
5. Optimise the efficiency of the existing transport networks and improve and maintain the existing transport infrastructure			✓		✓			✓	✓	✓	✓		✓	3,5,18,19,20	
6. Support residents, visitors and businesses in choosing sustainable modes of travel to reduce the use of the car and traffic congestion leading to a better environment	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	3,7,9,10,11,17	
7. Promote the safety and security of road and transport users		✓		✓	✓				✓	✓		✓	✓	12,13,14,15,16	
8. Improve and enhance access to jobs, services, health & leisure facilities		✓		✓	✓	✓			✓	✓	✓	✓	✓	15,16,17,18,19,20	
9. Make transport system accessible to all with a view to improving social inclusion	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓	✓	17,18,19,20	
10. Reduce the Borough's carbon footprint from transport to address the issue of climate change	✓	✓			✓					✓	✓	✓		3,7,9,10,11,17	

Figure 3.4: Interplay of strategic issues and responsibilities





The Delivery Plan

Chapter 4 Delivery Plan

Introduction

4.1 A key element of the LIP is a costed and funded Delivery Plan of interventions for the three-year period 2011/12 to 2013/14. TfL's LIP Guidance has set out specific requirements to be addressed in this Plan. Accordingly, this chapter provides (i) a programme of investment for a three-year work programme indicating a high-level breakdown of proposed spend, together with (ii) potential interventions in terms of individual schemes that in turn will address the objectives identified in Chapter 3. As outlined in that chapter, these are based on an analysis of problems and challenges. In this chapter it is further demonstrated how the Delivery Actions will support the MTS goals and the Borough's LIP Objectives. All potential sources of funding (including TfL's LIP funding) for this transport investment programme are then identified. A more detailed annual programme in the form of an Annual Spending Submission for the year 2011/12 has been submitted to TfL, using the specified Proforma A of LIP guidance.

Delivery Actions

4.2 Bexley's proposals across the full range of its transport and traffic functions are essentially relevant to the Borough's LIP objectives as well as the implementation of the MTS. The Council has a three-year work plan for its proposals for transport infrastructure investment, many of which are inter-related and have been running for a number of years, resulting in major benefits. The Council has a long-running local safety scheme programme which has a proven record of casualty savings. It has also had a programme for structural maintenance of principal roads to meet the national target for the percentage of the network in critical condition. Inter-related programmes are co-ordinated to achieve a 'joined-up approach' to scheme delivery. The design of all traffic related schemes, for example, involves a review of existing signs to achieve improvements and relieve clutter where possible.

4.3 The contents of this programme of investment are organised under the headings of the Borough's LIP Objectives listed in the previous chapter and demonstrated to be linked with the MTS goals. Table 4.1 lists the Council's Programme of Investment for three years in the prescribed proforma and linking them with the Bexley's LIP objectives. Whilst this table indicates both actual and estimated LIP allocations for the various proposed interventions, Table 4.2 provides a summary of all potential sources of funding.

4.4 Both the transport objectives and the Delivery Plan have been subject to Strategic Environmental Assessment (SEA) and Equality Impact Assessment (EIA). These are explained in Appendices 1 and 2.

Objective 1: Work towards improved transport systems that support regeneration and economic development in the Borough

4.5 Bexley's delivery actions to achieve this objective clearly involve substantial support from the Mayor of London and other appropriate agencies. However, as demonstrated in Table 3.3 in Chapter 3, this objective is fully consistent with the MTS and SRTP goals/challenges.

- **Crossrail:** Bexley will continue to support the Mayor of London and TfL to take forward the Crossrail connection to Abbey Wood and further east in future. The arrival of Crossrail presents an opportunity to make significant improvements to the Abbey Wood area as a whole and the station in particular. Therefore, an urban integration study for the improvement of public realm in the vicinity of new Crossrail station at Abbey Wood is programmed to be conducted in 2011/12. This relates to an elevated station that facilitates better interchange for passengers arriving and departing the station via Harrow Manor Way and will need to be delivered in parallel with the station design work undertaken by Network Rail. The Borough will also safeguard land needed for the extension of Crossrail to Gravesend and its LDF Core Strategy sets out aspirations in respect of infrastructure provisions to support regeneration.
- **Other rail improvements:** Bexley will work with Transport for London and rail network operators to extend coverage of real-time bus passenger information displays at railway stations within the Borough. Station access improvements are planned for Crayford station, should developer contributions towards a scheme become available.
- **Cycling and walking schemes:** Bexley has joined the Mayor of London's Biking Borough Initiative and a Cycling Strategy has been formulated. The Borough will continue to work with TfL to encourage cycling and walking locally, focussing on local attractors and other key destinations where the potential for modal shift is greatest. Cycling and walking routes are planned to support regeneration and economic development, particularly in Erith and Crayford town centres, including identification and removal of potential barriers to walking and cycling. Walk audits have been conducted in Bexleyheath and it is intended to improve the pedestrian routes to Bexleyheath and Barnehurst railway stations by means of engineering measures, better lighting, improved paving and signage.

- **Bus services:** As indicated in Chapter 2, buses constitute an important mode of public transport in the Borough, particularly as the whole of Bexley is outside the London Underground network. However, the current provision of bus services falls short of requirements in some parts of the Borough. Bexley, therefore, intends to work with TfL to improve and enhance bus operation to serve the regeneration areas in the north of the Borough.

Objective 2: Support growth needs in the Borough's spatial development strategy

4.6 Bexley has prepared an Integrated Transport Strategy to assess the transport infrastructure requirements for supporting housing and employment growth envisaged in the LDF Core Strategy. This has also informed both Objectives 1 and 3 of the LIP.

4.7 Several schemes contribute to this objectives. This includes an integrated transport package for Crayford Regeneration Area, Welling Corridor, Sidcup Town Area and Belvedere Town and Station Area as well as the BexleyheathTown Centre Revitalisation Scheme.

4.8 Several large developments in Crayford are assisting the regeneration of the town centre, and have already attracted a significant level of developer contributions towards transport infrastructure improvements. The proposal is to include funding in the Programme of Investment for 2011/12 and 2012/13 to supplement these contributions, and help to ensure that the improvements form part of an integrated transport package. The package will be aimed at a range of public realm enhancements, including improved public transport integration through bus infrastructure, cycling, walking and accessibility improvements in the locality of the railway station, local shops, nearby schools and other local attractors, smoothing traffic flow, particularly at the traffic signal controlled junctions, and improving facilities for kerbside activities.

4.9 As part of the development and delivery of the Programme of Investment, a number of corridors and neighbourhoods have been identified in which a range of transportation issues currently exist and/or where there are synergies between a number of ongoing schemes and interventions. In these locations, it is proposed to develop and implement a programme of Integrated Transport Packages. This involves a comprehensive treatment of transport and public realm issues, taking into consideration both ongoing commitments and future requirements and integrating engineering, urban design and smarter travel measures which not only look holistically at the issues and ongoing commitments, but also look at ways provide added value to the investment.

4.10 A Council priority over the lifecycle of this Local Implementation Plan is to undertake a series of public realm improvements along the entire A207 Welling corridor, between the borough boundary with the London Borough of Greenwich to the west, and Bexleyheath to the east. The character of this corridor changes depending on the section of the route concerned, and each section has its own unique set of issues. It is therefore planned to treat each section as a separate phase with a different integrated transport package which will resolve these issues and consider ways of incorporating other measures that will offer added value to investment. Funding for the development of each phase was included in the Programme of Investment for 2010/11, while allocations have been made for its implementation in the Programme of Investment for 2011/12, 2012/13 and 2013/14.

4.11 The Home and Communities Agency (HCA) has recently funded Bexley to prepare an Urban Development Framework for South Thamesmead. It will outline a design approach to the area, to highlight key development opportunities and priorities, and to help prioritise future investment. The framework will focus on:

- the area from Abbey Wood Station and its surrounds north to the Harrow Manor Way roundabout;
- the Gallions housing estates to the east at Tavy Bridge and Parkview;
- the surrounding areas, including the connections with the private residential area to Lesnes Abbey Woods.

4.12 £10.6 million has been secured from the HCA, ERDF and the LDA Parklands fund towards an ambitious environmental improvement programme to start transforming and uplifting the Belvedere Employment Area (BEA) and Erith Marshes. The future aim is for the BEA to become a flagship sustainable and accessible employment site and the employers' location of choice in the Thames Gateway.

Objective 3: Secure a more comprehensive, high-quality and integrated public transport system

4.13 Bexley has used its own resources to formulate a pre-feasibility study to improve and enhance north-south public transport links in the Borough including the potential to link the Borough to the London Underground network (see para 3.44). Delivery of this high-priority requirement will obviously depend on external resources. However, in the short to medium term, operation of express buses from Bexleyheath to North Greenwich Underground station has clear potential. Direct bus services will also benefit the north of the Borough. There will be some scope in the LIP Programme of Investment to undertake complementary measures such as integrated transport packages for corridors and neighbourhoods (see Objective 2 above), but additional funding will be required.

4.14 Specifically, Bexley is providing support to the Crossrail project and undertaking associated complementary measures, and other rail improvements as indicated under Objective 1 and 4. A public transport information booth at Bexleyheath Town Centre is planned to be set up to encourage and facilitate the use of available public transport facilities. It is also the Borough's intention to encourage the use of the rail for journeys to and from Bexleyheath Town Centre. To that end, walkability audits have been conducted to identify and improve the potential pedestrian routes to Bexleyheath and Barnehurst railway stations. Future LIP Programme includes proposals in this regard, combined with a comprehensive signage (Legible London) scheme.

4.15 Bexley is pushing for investment in public transport that will better connect the borough with London and the wider Thames Gateway region. Bexley is currently the only London borough without a tube, tram, light rail link or river transport. 'Invest Bexley' and the London Borough of Bexley are pushing for:

- A high speed travel link connecting Abbey Wood with Dartford
- Docklands Light Railway (DLR) extended to Thamesmead
- Crossrail not just built, but built to Ebbsfleet.
- 12 carriage trains to operate on existing train lines.

4.16 An initial analysis of the problems and challenges in the area around Barnehurst station has indicated that there would be benefits in prioritising investment in an integrated transport package in this neighbourhood. The package will be particularly aimed at improving public transport integration through bus infrastructure, cycling, walking and accessibility improvements in the locality of the railway station, local shops, nearby schools and other local attractors. It will also seek to improve the casualty record of the A220 corridor through Barnehurst. Funding for the development and implementation of the scheme is included in the Programme of Investment for 2011/12 and 2012/13 respectively.

4.17 A key project within the framework of £10.6m HCA funding is the construction of a link road between Church Manorway and Mulberry Way, connecting major employment sites and providing the potential for future transport links. This link road will also provide a route for a North Bexley Transit that would create a vital high speed link between the Crossrail station at Abbey Wood and Fastrack in Dartford, creating a Thames Gateway Transit. As well as improving access for businesses and their employees, the road will enhance access to open space, the River Thames and transport terminals.

Objective 4: Maximise benefits of regional transport developments

4.18 The delivery actions related to this objectives are essentially derived from the Sub-regional Transport Plan (East - SRTP). Bexley will support this Plan and work with TfL to utilise funded transport investment in the East sub-region to improve the Borough's connectivity. The SRTP does recognise that the poor connectivity of the two Opportunity Areas in the Borough – Bexley Riverside and Thamesmead & Abbey Wood – will be partially addressed by committed new transport infrastructure in the sub-region. Bexley will strive hard to fully exploit the potential of the available and committed infrastructure.

4.19 In the short term, discussions are continuing with Crossrail Ltd. to ensure that Abbey Wood station provides a high-quality interchange and spread the benefits to a wider catchment area. As indicated earlier, Bexley is involved with Crossrail Ltd in the urban integration study for the Abbey Wood Station Area. This includes interchange and public realm improvement. The new Crossrail station will perform an important role in providing physical improvements and will act as a catalyst and help support the regeneration of the Abbey Wood and Thamesmead area. Crossrail's proposed work for Abbey Wood will provide a new fully accessible station, providing better interchange with existing transport services and enhancing public capacity and accessibility at Abbey Wood. New and faster direct travel opportunities will be available to Docklands, the City, West End, and areas west to Maidenhead and Heathrow. Bexley is also keen to work with TfL to undertake suitable complimentary measures as identified in studies conducted by their and Crossrail's consultants. In the medium term it is intended to undertake LIP programmes related to complementary measures such as north-south bus links, improved cycle routes and regeneration initiatives.

Objective 5: Improve and maintain the existing transport infrastructure

4.20 As indicated in Chapter 2, the London Borough of Bexley has developed a Highway Asset Management Plan (HAMP), which seeks to develop knowledge and understanding of the borough's highway network in terms of inventory, condition, levels of service, risk management, lifecycle planning and finance and valuation. This will enable longer term programming of work and a better understanding of funding needs over time and the implications on change in budgets with regard to service levels defined or expected. It is the intention of the HAMP to deliver key improvement actions. The Borough's first LIP (2005-10) identified the need for substantial investment to maintain the overall condition of many principal roads in the Borough that were in need of structural maintenance.

Despite continuous improvement over the last two years, an annual investment in excess of £1.5 million is required to maintain the required rate of improvement as recorded at National Indicator level.

4.21 Bexley will prioritise investment in principal road maintenance based upon traffic, safety and asset condition data, in accordance with the priorities set out in the HAMP. Priority will also be given to schemes in locations where other initiatives, such as local safety, walking, cycling and public realm improvement schemes have been identified, in order to minimise the period of disruption and provide added value to the investment. During the period 2011/12 to 2013/14, the roads identified for maintenance (Table 4.1) are based on these criteria.

4.22 The Council places high importance on bridge maintenance, and has a programme of bridge assessment and strengthening for those within its remit. It also continues to support sustained investment for its street lighting column replacement and flood management programmes.

Objective 6: Support residents, visitors and businesses in choosing sustainable modes of travel

4.23 The central plank of Bexley's long-term Integrated Transport Strategy is the objective to progressively secure a well-integrated, reliable, convenient and sustainable transport system in the Borough. To that end, promotion and provision of sustainable modes of travel plays an important role. The Borough has therefore undertaken and plans to implement a number of measures.

Smarter Travel Initiatives and improved infrastructure

4.24 Biking Borough and cycling schemes: Bexley has been identified by Transport for London as one of the first Outer London Biking Boroughs and has developed a Cycling Strategy. This focuses on investigating ways of developing cycling and to encourage cyclists and would-be cyclists to take advantage of the 2.4 million "cycleable" journeys that are made each day in outer London by car. The Council supports the development of both strategic and local cycle networks to provide safe and convenient routes. It has a long-term strategy to link all the major destinations such as schools, hospitals, shopping centres and recreation areas with the residential neighbourhoods in the Borough by means of a network of safe cycle routes. Bexley aims to work more closely with local businesses to target local commuter journeys, and encourage initiatives, such as the provision of cycle parking and changing facilities, targeting key employment areas such

as Bexleyheath, Abbey Wood, Belvedere, Crayford and Welling. Bexley will also promote a series of quieter routes and off-road route that exist using the Borough's green spaces and Greenways network as the platform for this. Consideration will be given to reduce the conflict between the safety of pedestrians and cyclists whenever a shared path is used for both these groups.

4.25 Cycle parking facilities at town centres and key destinations such as railway stations will continue to be enhanced. This will be linked with the implementation of the Travel Plans by the major employers, including the Council itself. Bexley has a continuing programme of cycle training for both children and adults.

4.26 Walk audits and improvement of walkability: A number of walk audits have been undertaken recently to identify the potential and constraints of pedestrian routes to principal destinations such as Bexleyheath and Barnehurst railway stations. A priority scheme planned in this regard for the year 2011/12 is the design of a comprehensive signage package in accordance with the Legible London programme. In addition, the Erith pedestrian links to encourage walking in Erith Town Centre is planned to be implemented over the next three years. The local traffic schemes provide small-scale interventions to assist pedestrians as well as to aid traffic movements.

Travel Awareness and Travel Plans

4.27 Bexley recognises that there is a particular need in the Borough to raise awareness of sustainable travel amongst local residents, businesses and visitors. The relatively high car ownership and the inadequate provision of high-quality public transport make it especially important to publicise the message of this campaign.

4.28 Bexley will continue to promote 'Walk to Work' and 'Bike to Work' 'Bike Week' and car share campaigns in association with the sub-regional travel plan co-ordinators, Sustrans and Living Streets.

4.29 The Council requires major employers in the Borough to formulate and implement workplace travel plans. A Staff Travel Plan for the Council's own employees has already been prepared and is being implemented. In conjunction with the Bexleyheath Town Centre Revitalisation Scheme, an area-wide travel plan for the town centre is being prepared. In recognition of the importance of reducing the share of car trips for school journeys, a Sustainable Modes of Travel Strategy for schools was formulated. All schools in the Borough except one now have travel plans and it is intended to continue to support the schools to implement these plans. Support is also offered to schools to review their travel plans, as advised by Transport for London. Bexley also intends to carry out personalised travel planning in selected wards of the Borough, when funds become available.

Objective 7: Promote the safety and security of road and transport users

4.30 Bexley's delivery actions for the period 2011/12 to 2013/14 build on the achievements in reducing road casualties in recent years, with the core activities of road safety engineering, education and enforcement remaining as the key elements. These activities will be complemented with a programme of engineering measures identified from school travel plans, and the ongoing road maintenance programme.

4.31 The Council's approach to crime and disorder is contained in the Community Safety Strategy. The Strategy identifies key transport-related crime and disorder issues in the Borough, and the Bexley Community Partnership, established in 1996, acts as a conduit for tackling crime issues. A sub-group of the Partnership considers Safer Travel, and is attended by the Metropolitan Police, the British Transport Police and Transport for London. An audit of crime and disorder in the Borough is undertaken every 3 years, based not just on statistical data, but also on people's perception of crime.

4.32 Designing out crime: The Council aims to ensure that safety and security considerations are incorporated into the planning and design of transport schemes. Investment in improvements to street lighting and the provision of CCTV will be focussed on areas where crime and the fear of crime is known to be problematical. As a part of the Borough's HAMP, street lighting will be maintained to a high standard across the Borough. Security related improvements will form part of the package of measures proposed for Bexleyheath town centre.

4.33 Raising awareness on safety: Road safety campaigns and exhibitions form an integral part of the Council's Road Safety Plan and will be continued throughout the LIP period.

Objective 8: Improve and enhance access to jobs, services, health and leisure facilities

4.34 Most of the delivery actions, such as improved infrastructure for walking and cycling, station and rail improvements, promotion of sustainable modes of transport, etc. indicated in respect of the previously mentioned LIP objectives clearly contribute to the current objective. Specifically, some of Bexley's programme for 2011/12 to 2013/14 involve:

4.35 Borough-wide local accessibility programme: Bexley aims to make all town centres, public buildings, public transport modes, interchanges and other local attractors as accessible as possible, especially for people with mobility and visual impairments, through an ongoing programme of accessibility improvements.

These improvements, intended to improve the physical accessibility of the transport system and access to services, will include measures such as signing, marking, tactile paving and dropped kerbs. The Borough has successfully achieved its target of installing tactile paving and dropped kerbs at all controlled crossing sites. The Council will also continue to provide convenient, designated parking spaces for disabled persons' vehicles at key locations. A shopmobility scheme has been implemented in Bexleyheath Town Centre, with the involvement of Inspire Community Trust.

Objective 9: Make the transport system accessible to all

4.36 The Council is committed to identifying and eliminating barriers to movement of all people, particularly those with disabilities. It has built up good working relationships with local access groups and Council staff that represent local disabled people. These contacts are considered essential to deliver effective improvements where they are needed most. The Borough-wide local accessibility programme and station access improvement schemes described earlier also contribute to this objective. Other measures are:

4.37 Borough-wide bus-stop accessibility programme: Bexley supports TfL's aim to make London's bus services fully accessible for all users by providing appropriate facilities that can be effectively served by low-floor buses. The Council intends to continue to improve accessibility to bus services in the Borough by implementing clearways at every stop, providing adequate height of kerbs and improving passengers' routes to stops as well as the stop environment itself.

4.38 Community Transport for Groups: The Bexley Accessible Transport Services (BATS) was set up in 2004 with a view to providing a community transport services for the inhabitants of Bexley and its neighbourhood who are in need of such services because of age, sickness or disability or poverty or because of a lack of availability of adequate and safe public transport services. Funding from TfL was sought (but not received) under the first LIP to supplement the budget of BATS. It is intended to continue to support this programme.

Objective 10: Reduce the Borough's carbon footprint from transport

4.39 The Council recognises that transport is the largest single contributor to carbon emission and, therefore, is determined to do what it can to change public attitudes to transport and individual choices in the way people travel. By raising awareness, Bexley hopes to reduce reliance on the car.

4.40 To this end, the appropriate delivery actions have been described earlier. These relate to encouraging carbon-efficient travel behaviour such as workplace travel plans, travel awareness campaigns and events, school travel plans and associated measures.

- **Environmental monitoring and assessment:** Bexley will continue to monitor and assess air quality and traffic noise in the Borough, and will consider suitable mitigation measures where possible in the design of schemes and interventions. These include measures to reduce congestion and smooth traffic flow, particularly in town centres (e.g. highway improvements, urban traffic control and driver information systems etc.), supporting the use of low carbon technology, including electric, hybrid and bio-fuelled vehicles, both in the Council's own fleet and by the general public, supporting London Low Emission Zone and car clubs. Other related measures are described below. Manor Road, Erith was designated as the first Air Quality Management Area and Bexley will continue to develop actions to determine the contribution to air pollution by different types of vehicles.
- **Electric charging points:** Bexley will work with TfL to identify the scope for installing electric charging points as part of town centre revitalisation schemes and sustainable development policies. The major scheme for Bexleyheath Town Centre Revitalisation will explore the potential for such a proposal.
- **Operational efficiency and network management:** Measures to smooth traffic flow include traffic management schemes aimed at improving network capacity, including the improvement, and where appropriate, the removal of traffic signal control, junction improvements, road-space reallocation, new and upgraded kerbside waiting and loading controls and increased enforcement of restrictions on key routes. The comprehensive revitalisation schemes for Sidcup and Bexleyheath town centres include proposals for traffic signal removal and public realm improvement using the Better Streets concept. In addition, the Borough is carefully performing its Network Management Duty to minimise disruption and congestion to all road users that will contribute to the reduction of pollution.

Implementation of Bexley's Network Management Duty (NMD)

4.41 The specific requirements of the Traffic Management Act, 2004 (TMA) have inevitably impacted on some of Bexley's institutional arrangements and procedures. To provide an essential role, a Traffic Manager has been designated and a Highway Network Management Team established. During the last five years, to meet the additional requirements of the NMD, the existing procedures in the Borough's street works management, traffic management and related aspects have been reviewed and strengthened as appropriate. In view of London's unique local government structure, it is also considered necessary to consult with London Councils and Transport for London to ensure a shared approach between all the London boroughs. It is, however, important to appreciate that there are resource implications of delivering, in the best possible way, all necessary tasks involved in performing NMD.

4.42 In performing the NMD, the Highway Network Management Team meets once a month to discuss matters relevant to NMD. It is chaired by the Traffic Manager and its members are drawn from the Public Realm Management Department as well as the Highways and Amenities Department of the Council. All relevant divisions of the Directorate of Environment & Wellbeing are also made aware of the implications of the Traffic Management Act and the requirement to consider how their policies, practices and operations impact on the Borough's highway network and to consider what action they can take to minimise any adverse effects. A Network Management Plan was produced in September 2008 by the then Transport and Traffic Services Division, setting out Bexley's detailed approach to the NMD.

4.43 The Network Operations Assistant has responsibility for controlling many of the day-to-day activities that can contribute to congestion on the Borough's roads, for example utility works. Currently, there are approximately 10,000 separate utility works in Bexley each year. In addition, there are some 19,000 individual works (including street lighting) carried out annually by Bexley's Contractor. The Council has not yet commenced issuing permits for all registerable works in implementation of Part 3 Sections 32-39 of the TMA. It will consider this issue once the impact of the first tranche of London Borough permit schemes are assessed.

4.44 There are 1750 scheduled inspections to comply with the New Roads and Street Works Act and with a similar number of other inspections undertaken as works proceed. Regular meetings are held with the utilities to discuss future programmes, standards of workmanship and noticing issues. The utility works are coordinated with the Council's programme of major works to minimise disruption to pedestrians and vehicle traffic including public transport. This was evident in the recent coordination of the gas main replacement

works in Sidcup with the footway reconstruction work undertaken by the Council in the same area.

4.45 In performing the Borough's Network Management Duty, consideration is given to one of the important objectives of the LIP to reduce road traffic congestion whilst meeting development pressures. The delivery of the road safety and public realm improvement schemes is also planned in the context of the impact of road works.

4.46 Figure 2.7 in Chapter 2 shows delays and congestion on Bexley's roads.



Programme of Investment

4.47 Bexley's three years' Programme of Investment for the years 2011/12 to 2013/14 is set out in Table 4.1. This follows the delivery actions indicated in Chapter 3 and the approach taken by the Borough in regard to implementing each of its ten LIP objectives explained earlier in this chapter.

4.48 The allocations of expenditure in the Table relate to TfL's formula-based LIP funding for defined transport programmes. Whilst this also supplements the Borough's efforts in implementing some major schemes for town centre revitalisation, the principal investment for these schemes is outside the scope of Table 4.1 and is dealt with separately in consultation with TfL's appropriate programme managers for such schemes. At present two Area-Based Schemes for Sidcup and Bexleyheath Town Centres are in progress and it is expected that LIP funding in the Welling corridor will pave the way for another such scheme in Welling Town Centre.

4.49 It is also important to mention that the London Borough of Bexley uses its own funds, including developers' contributions, for considerable investment in transport infrastructure. This includes borough road maintenance, street lighting and drainage. TfL's investment on the maintenance of TLRN will also complement these measures.

4.50 The main components of the Programme of Investment shown in Table 4.1 are explained below.



Major Schemes

4.51 Major Schemes (formerly called Area Based Schemes) play a significant role in comprehensively transforming the town centres of Bexley, by addressing both transport and public realm issues and contributing to area-wide revitalisation. They also support the Mayor's Better Streets campaign, with suitable application of the shared space concept. At present, Bexley has embarked on two such schemes, for which TfL has provided funding. These schemes contribute to Bexley's LIP Objectives Nos. 1, 2, 5, 6, 7, 8, 9 and 10.

Sidcup Town Area Renewal

4.52 The Sidcup Town Area Renewal scheme is a Council priority and has been ongoing since 2008/09, initially funded primarily from Transport for London's Major Schemes (formerly Area Based Schemes) budget and developer contributions. Phases 1 and 2 of the scheme related to Elm Road and Station Road, Sidcup respectively.

4.53 Phase 3 of the scheme will involve an integrated transport package for Main Road and High Street, Sidcup. Funding for the development of this package was included in the Programme of Investment for 2010/11, while allocations have been made for its implementation in the Programme of Investment for 2011/12 and 2012/13. This phase will be aimed at a range of public realm improvements, including improving the casualty record of this route, upgrading facilities for pedestrians, increasing bus stop accessibility, removing barriers to access, smoothing traffic flow, particularly at the traffic signal controlled junctions and improving facilities for kerbside activities.

Bexleyheath Town Centre Revitalisation (BTCR)

4.54 The broad objective of this major scheme, formulated in accordance with the guidance issued by TfL (for its formerly termed Area Based Scheme) is to achieve transport and public realm improvement in Bexleyheath that in turn will help revitalise this strategic town centre. Bexleyheath is yet to take full advantage of all the strengths that come from being located at the 'strategic heart' of the Borough. There are many opportunities that need to be followed through to help the town centre adapt and change to achieve its full potential. These opportunities cover both the daytime and evening economies. Thus the successful implementation of the major scheme for the revitalisation of Bexleyheath Town Centre is expected to achieve the following objectives:

- Produce a true step-change in public realm and local area character, using an appropriate shared space concept, de-cluttering, better lighting and landscaping;

- Improve pedestrian links at road junctions (including removal of some traffic signals) and from surrounding residential areas to the town centre and railway stations;
- Introduce Legible London signage scheme;
- Encourage use of sustainable modes of transport by smarter travel initiatives, improving the layout of bus stops and shelters and setting up a public transport information facility;
- Contribute to economic objectives by improving accessibility and environment for local retailers and businesses.

4.55 The Final Report by a group of specialist consultants on a Conceptual Master Plan and Outline Design for this ABS, Phase 1 was produced in February 2011 and work on detailed design of the various elements of the scheme commenced in March 2011. The Phase 1 study area covers the Broadway from its junction with Church Road to its junction with Watling Street and Erith Road via Arnsberg Way. The rest of the town centre including in particular, Albion Road and the pedestrianised area of Broadway, will be dealt with in Phase 2 of BTCR. For this, further financial support will be sought from TfL as planned.

4.56 Transport for London has provided funds for the design of Phase 1 of the scheme and a further sum of £3.05m has been approved for the planned implementation of this phase. The total estimated cost for Phase 1 of BTCR is £4.12m. TfL has agreed to provide 85% of this cost and the remaining 15% will be met from developers' contributions and some Council funding. The construction work for the implementation of this scheme is planned to start in Spring 2012, taking into consideration the road work restrictions for the Olympics.

Other notable schemes

Erith Pedestrian Links

4.57 Erith pedestrian links comprise the Howbury link and the Erith Riverside pedestrian link. The former aims to develop and formalise walk routes to the Howbury centre and adjacent sites, providing a direct link to Manor Road which leads to Erith Town Centre. The Erith Riverside pedestrian link is aimed to exploit the potential of a route from the riverside, the town centre and Erith High Street. The funding for the phased implementation of the scheme is spread over 2011/12, 2013/14 and 2013/14.

London Road/Bourne Road Junction Improvement

4.58 This regeneration project is listed in Bexley Investment Plan. The current, T-junction layout at the intersection of London Rd / Bourne Rd is particularly problematic, leading to significant peak-hour congestion for traffic approaching Crayford from Bexley and the A2. Nearby, the junction of London Rd / Bexley Lane is considered to be aesthetically poor, difficult for pedestrians to negotiate particularly given the junction's proximity to a key public open space; Shenstone Park, with what appears to be a myriad of signs and railings marring this approach to the town centre. Initial modelling work has taken place and funding is sought to progress an enhanced design feasibility study to consider further options. This project is seen as a significant part of Crayford Regeneration (see para 4.8) contributing to the improved 'gateway' to Crayford.

Smarter Travel: Workplace Travel Plan

4.59 A key objective of Bexley's sustainable transport strategy is to encourage modal shift in the choice of travel modes. As indicated earlier, the Council has produced a Staff Travel Plan for its own employees and has taken steps to progressively introduce school travel plans in all the schools of the Borough. Bexley also shares TfL's view that innovative ideas applied in other cities to promote travel awareness and travel plans have potential prospects in the London context. Local travel plans groups (TMAs) and area-wide travel plans are therefore proposed. Accordingly, the Programme of Investment includes proposals for an area-wide travel plan for Bexleyheath Town Centre, travel awareness campaigns and local walking and cycling initiatives. These will also complement the major scheme for transport and public realm improvement for Bexleyheath.

Table 4.1: Three Years' Programme of Investment

Programme areas	Delivery actions	Funding source	Ongoing scheme?	Funding (£,000s)				MTS goals				LIP Objectives	
				2011/12	2012/13	2013/14	Total	Econ. dev't and pop growth	Quality of life	Safety and security	Opportunities for all		Climate change
Corridors and Neighbourhoods	1 Sidcup Town Area Renewal - Integrated transport package	LIP allocation		350	50	0	400	✓	✓	✓	✓	✓	1,2,5,6,7,8,9
		Developer		35	0	0	35						
	2 Welling Corridor - Integrated transport package	LIP allocation		600	600	600	1,800	✓	✓	✓	✓	✓	1,2,5,6,7,8,9
		Developer		30	0	0	30	✓					
	3 Barnehurst Neighbourhood - Integrated transport package	LIP allocation		25	250	0	275	✓					1,2,5,6,7,8,9
		Developer		90	50	0	140	✓	✓	✓	✓	✓	1,2,5,6,7,8,9
	4 Crayford Regeneration - Integrated transport package	LIP allocation		90	50	0	140	✓	✓	✓	✓	✓	1,2,5,6,7,8,9
		Developer		480	400	0	880						
	5 London Road/Bourne Road - Junction improvement	LIP allocation		0	140	60	200	✓	✓	✓	✓	✓	2,5,8
	6 Slade Green Station Area - Walking and accessibility improvements	LIP allocation		0	20	100	120	✓	✓	✓	✓	✓	5,6,7,8
	7 Erith Station Area - Walking and accessibility improvements	LIP allocation		0	20	100	120	✓	✓	✓	✓	✓	5,6,7,8
	8 Albany Park Station Area - Walking and accessibility improvements	LIP allocation		120	0	0	120	✓	✓	✓	✓	✓	5,6,7,8
	9 Abbey Wood Station Area - Urban integration study	LIP allocation		10	0	0	10	✓	✓	✓	✓	✓	1,4,5,8
	10 Local safety scheme - Identification and development	LIP allocation	✓	20	40	40	100	✓	✓	✓	✓	✓	5,6,7,8,9
	11 Local safety scheme - Implementation	LIP allocation	✓	420	410	426	1,256	✓	✓	✓	✓	✓	5,6,7,8,9
	12 Local safety scheme - Maintenance	LIP allocation	✓	0	20	20	40	✓	✓	✓	✓	✓	5,6,7,8,9
13 Environmental monitoring - Gravimetric air quality monitoring	LIP allocation	✓	20	20	20	60	✓	✓	✓	✓	✓	10	
14 Local traffic schemes - Small scale interventions	LIP allocation		50	0	0	50	✓	✓	✓	✓	✓	6,7,8	
15 Traffic signal removal - Identification and assessment of traffic signal sites for removal	LIP allocation	✓	40	40	40	120	✓	✓	✓	✓	✓	5,7,8	
16 Local area accessibility - Boroughwide programme	LIP allocation	✓	75	75	75	225	✓	✓	✓	✓	✓	7,8,9	
Smarter Travel	17 Child pedestrian training	LIP allocation	✓	25	10	10	45	✓	✓	✓	✓	✓	6,7,8,9
	18 Cyclist training	LIP allocation	✓	80	80	80	240	✓	✓	✓	✓	✓	6,7,8,9
	19 Road safety campaigns and exhibitions	LIP allocation	✓	20	20	20	60	✓	✓	✓	✓	✓	5,6,7,8,9
		Council revenue	✓	20	20	20	60						
	20 Erith pedestrian links	LIP allocation		30	30	40	100	✓	✓	✓	✓	✓	6,7,8,9
	21 Local cycle route - Identification and development	LIP allocation	✓	20	20	20	60	✓	✓	✓	✓	✓	6,7,8,9
	22 Local cycle route - Implementation	LIP allocation	✓	0	30	30	60	✓	✓	✓	✓	✓	6,7,8,9
	23 Travel awareness - Area-wide travel plan for Bexleyheath Town Centre	LIP allocation		19	20	0	39	✓	✓	✓	✓	✓	2,6,8
	24 Travel awareness campaigns	LIP allocation	✓	20	20	20	60	✓	✓	✓	✓	✓	2,6,8
	25 Walkability signage in Bexleyheath	LIP allocation		40	20	0	60	✓	✓	✓	✓	✓	2,6,8
26 Electric charging points - Identification, development and implementation of a pilot scheme	LIP allocation	✓	0	5	5	10	✓	✓	✓	✓	✓	2,6,8,10	
Integrated transport total				2,639	2,410	1,726	6,775						
Maintenance	27 A2018 Dartford Road	LIP allocation		206	0	0	206	✓	✓	✓	✓	✓	2,5
	28 A223 Edgington Way	LIP allocation		0	195	0	195	✓	✓	✓	✓	✓	2,5
	29 A222 Bexley High Street	LIP allocation		140	0	0	140	✓	✓	✓	✓	✓	2,5
	30 A222 Station Road/Hurst Road	LIP allocation		140	0	0	140	✓	✓	✓	✓	✓	2,5
	31 A221 Arnsberg Way	LIP allocation		45	0	0	45	✓	✓	✓	✓	✓	2,5
	32 A210 Blackfen Road	LIP allocation		195	385	0	580	✓	✓	✓	✓	✓	2,5
	33 A221 Arnsberg Way/A207 Albion Road	LIP allocation		0	390	0	390	✓	✓	✓	✓	✓	2,5
	34 A2041 Harrow Manor Way	LIP allocation		0	200	0	200	✓	✓	✓	✓	✓	2,5
	35 A221 Hurst Road	LIP allocation		0	0	470	470	✓	✓	✓	✓	✓	2,5
	36 A2016 Eastern Way	LIP allocation		0	0	500	500	✓	✓	✓	✓	✓	2,5
	37 A222 Frogna Roundabout and Approaches	LIP allocation		0	0	175	175	✓	✓	✓	✓	✓	2,5
	38 A223 North Cray Road	LIP allocation		0	0	225	225	✓	✓	✓	✓	✓	2,5
	39 Principal road maintenance - minor repairs	Council revenue	✓	40	40	40	120	✓	✓	✓	✓	✓	2,5
	40 Bridge assessment and strengthening - Church Road bridge, Bexleyheath	LIP allocation		0	26	0	26	✓	✓	✓	✓	✓	2,5
41 Bridge assessment and strengthening - Bridge Road bridge, Bexleyheath	LIP allocation		0	174	0	174	✓	✓	✓	✓	✓	2,5	
42 Bridge assessment and strengthening - High Street bridge, Bexley	LIP allocation		50	0	0	50	✓	✓	✓	✓	✓	2,5	
43 Bridge assessment and strengthening - Harrow Manor Way elevated roundabout, northern approach	LIP allocation		200	0	0	200	✓	✓	✓	✓	✓	2,5	
44 Bridge assessment and maintenance - Boroughwide	Council revenue	✓	142	142	142	426	✓	✓	✓	✓	✓	2,5	
Maintenance total				1,158	1,552	1,552	4,262						
Major Schemes	45 Bexleyheath Town Centre Revitalisation	LIP allocation	✓	200	3,150	0	3,350	✓	✓	✓	✓	✓	1,2,5,6,7,8,9
	46 Sidcup Town Area Renewal	LIP allocation	✓	70	0	0	70	✓	✓	✓	✓	✓	1,2,5,6,7,8,9
Major Schemes total				270	3,150	0	3,420						

Table 4.1: Three Years' Programme of Investment continued

	2011/12	2012/13	2013/14	Total
LIP ALLOCATION TOTALS				
Corridors, Neighbourhoods and Supporting Measures (Smarter Travel)	2,074	1,990	1,706	3,696
Maintenance total (Note: allocations for 2012/13 and 2013/14 are aspirational)	976	1,000	1,000	2,976
Major Schemes total	270	3,150	0	3,410
TOTALS	3,320	6,140	2,706	10,082

Table 4.2: Potential funding for LIP delivery (£'000)

Funding source	2011/12	2012/13	2013/14	Total
Integrated Transport (Corridors, neighbourhoods and Smarter Travel excluding Maintenance)				
LIP Allocation (Needs-based formula)	2,604	2,410	1,726	6,740
Council Capita/Revenue Funding	74	74	70	218
Third Party Sources				
Developer Contributions	610	400	0	1010
Business Improvement District Funding	10	25	25	60
Community Infrastructure Fund	0	0	0	0
Sub-total	3,298	2,909	1,821	8,028
Maintenance				
LIP Allocation	976	1,000*	1,000*	2,976
Council Capital/revenue Funding	4,187	4,187	4,187	12,561
Sub-total	5,163	5,187	5,187	15,537
Major Schemes				
Bexleyheath Town Centre Revitalisation:				
• LIP Major Scheme funding	200	3,150	0	3,350
• Developer contributions	50	150	450	650
• Council funding	60	60	60	180
Sidcup Town centre Renewal Scheme				
• LIP Major Scheme funding	70	0	0	70
• Developer contributions	220	90	0	310
• Council funding	30	0	0	30
Sub-total	630	3,450	510	4,590
Grand total:	9,091	11,546	7,518	28,155

* Denotes aspirational LIP allocations

Developing the Programme of Investment

4.60 An evidence-based approach has been used to identify the schemes and interventions shown on table 4.1, and to assign a priority which ensures that the funding provided is invested prudently, and delivers both the goals of the Mayor's Transport Strategy and Bexley's transport objectives. This approach helps to ensure that investment is made in schemes and interventions which achieve real benefits and with measurable outcomes.

4.61 The proposed schemes and interventions identified in Table 4.1 will be delivered by April 2014, with the exception of those indicated as ongoing measures, such as local safety schemes, pedestrian and cyclist training and road safety campaigns and exhibitions, which will continue for the foreseeable future.

4.62 In addition to the schemes listed in Table 4.1, there are a number of unfunded longer-term projects that are considered important by the Council to fully address the LIP objectives. In particular, the high-quality public transport projects will play a significant role both in promoting sustainability and economic regeneration in the Borough. The proposed schemes are:

- London Underground (Jubilee Line) extension to the Borough;
- DLR extension
- North Bexley Transit
- Public realm and interchange at Abbey Wood related to Crossrail
- Queens Road Junction Improvement
- Manor Road Relief Road
- Darent Industrial Estate Access
- Howbury Rail Freight Interchange
- River Darent Pedestrian/Cycling Bridge
- River Cray Greenway
- SE London Green Chain
- Thames Road Rail Bridge
- Crossness Access Road
- Erith Pier Upgrade

Prioritisation

4.63 Evidence is gathered from a range of sources to assist with the identification of schemes to be included in the programme of investment, including issues identified by the community and other stakeholders, known parking and congestion hotspots, analysis of the crash database, outputs from walking and accessibility audits, traffic journey-time, speed and census data, and previous and ongoing projects. This evidence is then mapped to identify locations where links and synergies exist, and where added value could be achieved from the investment through schemes which achieve a number of goals and objectives. An assessment of the feasibility of the schemes is then made, and viable options are then costed, to assist with the prioritisation process.

4.64 A needs-based approach is taken to scheme prioritisation, to ensure that where possible, the maximum benefit is obtained from the limited resources available, and that Bexley's transport objectives are delivered. Emphasis is given to schemes which improve the safety and efficient movement of traffic, and which encourage modal shift, and where the expected outcomes achieve value for money.

4.65 Thus, the transport areas that this Council considers to have the highest priority are based on a number of factors as follows: -

- Meeting existing commitments and unavoidable expenditure;
- Improvement of transport infrastructure considered essential for regeneration especially in the deprived areas of the Borough;
- Continued and enhanced measures to improve road safety, reduce the number of casualties arising from accidents;
- improve accessibility to and public realm of town centres and regeneration areas;
- Maintaining the progress of the highway and structural maintenance programme;
- Ensuring that the London-wide and regional package bids involving this authority's participation are progressed (including bus, cycle and bridge works);
- Progressing minor schemes for which
 - i. There are statutory implications;
 - ii. No other source of funding is available; and
 - iii. The Council is already considering funding.

4.66 The Council is seeking better transport links across the Borough and with the neighbouring areas. It is particularly anxious to reduce social exclusion. Transport provides a vital means of access to employment, leisure and a range of goods and services. The Council therefore welcome TfL's intention to integrate Equality and Inclusion issues. However, transport infrastructure is inadequate in the Borough and this applies particularly

to the provision of public transport facilities. There are also significant variations in the level of personal mobility within Bexley. There are some areas in the north of the Borough, such as the Belvedere Employment Area, that are quite poorly served by public transport and yet have considerable regeneration potential. There are also the general difficulties faced by persons with disabilities to have access to transport. Access to employment opportunities, goods and services may be severely limited to such groups of people.

4.67 In the light of the above, in determining its priorities in formulating and implementing the local transport schemes, the Council has two primary considerations: the local needs and aspirations, and the need to support the Mayor of London's priorities.

4.68 A number of wider regional transport schemes of strategic importance will inevitably influence the Council's own priorities for transport investment. These include the Crossrail (including its possible extension to Gravesend, the Thameslink, DLR extension and any potential scheme to improve transport connectivity to Bexley.

High-profile outputs

4.69 Bexley's Programme of Investment includes several schemes that address the Mayor's high profile outputs categorised in Appendix 'E' of the LIP Guidance. These are demonstrated in Table 4.3.

Table 4.3: High-profile outputs

Output	Proposal
	<p>Bexley's Cycling Strategy (under the 'Biking Borough' initiative) includes a proposal to roll out increased cycle parking at sites identified in the strategy and work to address issues of cycle security. The Council has been providing on and off-street cycle parking facilities for many years now, and already has a good level of provision at most public sites. However, these facilities are often in need of improvement, and hence studies will be carried out at each location to enable an informed decision to be made on whether to upgrade and/or expand them. Through this process, it is anticipated that each year during the period 2011/12 to 2013/14, around 30 new on-street cycle stands at leisure facilities, and at work places. Where possible, the Council will aim to provide these facilities as part of integrated transport packages, such as the Sidcup Town Area Renewal, Welling Corridor, Barnehurst Neighbourhood and Crayford Regeneration Schemes, and/or from non-LIP funding, at an average value of £30k per annum.</p>
Cycle Superhighways	<p>TfL's plans for Cycle Superhighways will provide direct, comfortable and safe links between central and inner London. However, none of these routes extend to Bexley. Route 4 which is planned for completion by 2015 will link Woolwich in Greenwich to London Bridge providing opportunities for linked trips from north Bexley via the LCN+. Bexley's current programme for cycle training and cycle parking will take into consideration the potential for using this route.</p>
Electric vehicle charging points	<p>As indicated in Para 4.40, Bexley will work with TfL to identify the scope for installing electric charging points at town centres. At new large developments where TfL would require such charging points, Bexley will secure their siting.</p>
Better Streets	<p>Bexley's two ongoing Major Schemes (formerly Area Based Schemes) described in paragraphs 4.51 to 4.56 focus on a suitable application of the shared space concept and removal of guardrails and clearly contribute to the Mayor's Better Streets agenda. The Welling and Sidcup corridors improvement schemes also have similar objectives.</p>
Cleaner local authority fleets	<p>The Council's Staff Travel Plan encourages includes a proposal to introduce cleaner fuel in the Council-owned vehicles. Bexley has reviewed its transport fleet to see costs and emissions can be reduced. It has also reviewed its ground maintenance contracts, looking for reductions in fossil fuel usage.</p>
	<p>During 2009/10, some 239 trees were removed for various reasons. These are being replaced during the ongoing street tree planting programme. In the same period 402 new street trees were planted, including 75 trees planted through the Mayor of London's Street Tree Planting Programme. Bexley follows a recommendation from the Tree and Woodlands Scrutiny Review which was to "adopt a policy that seeks no net annual reduction in the number of street trees, and an increase in number if at all possible". As a result the average loss of street trees is calculated over a five years period. Any trees planted as part of the Mayor of London's Street Tree Planting Programme will be in addition to this number.</p>



Timescale for intervention

4.70 The London Borough of Bexley is confident in delivering its planned interventions in their entirety to achieve the LIP objectives within the timescale of the Mayor's Transport Strategy, i.e. by 2031. As expected, completion of individual schemes and measures will vary within the 20-year period 2011 to 2031. Some, eg. local safety schemes, travel awareness campaign, cyclist training and highway maintenance are regular ongoing initiatives. On the other hand, there are a number of longer term non-LIP funded projects (indicated in para 4.52) that are unlikely to be delivered before 2031, subject to availability of funds. Of the two major schemes, Sidcup Town Centre Area Regeneration will be completed in 2011/12 whilst the Bexleyheath Revitalisation Scheme is planned to be implemented by 2013/14. In general, the Council's Programme of Investment will be reviewed every three years.

Risk Assessment and Mitigation

4.71 All programmes and schemes have risks attached to their development and implementation, and it is therefore important that all risks are identified and managed, to ensure problems are minimised and so assure the optimum delivery of the LIP programme.

4.72 The Department for Transport (DfT), in its guidance for Local Transport Plans, has issued a Good Practice Note on Programme and Risk Management. This guidance has been followed in devising Bexley's approach to the risk assessment and mitigation of its LIP Delivery Plan.

4.73 The LIP is intended to be set within the framework of a long-term strategy consistent with the Mayor of London's Transport Strategy for the 20-year period up to 2031. However, the current LIP specifically sets a three-year rolling programme between 2011/12 to 2013/14 that will have a scope to be refreshed periodically. Therefore, as indicated in the DfT guidance, the long-term vision will provide the overall mechanism for managing the delivery of the LIP. Risk assessment and management address both the components of the LIP and the processes to manage them.

4.74 Within this context, the first issue to be considered in risk management is to ensure that a mechanism to use and maintain the relationship between the LIP and other planning activities (such as the Sustainable Community Strategy, Local Development Framework Core Strategy etc) is in place. In Bexley, this is overseen by the Corporate Policy and Performance Team. The Council operates a series of risk registers for the operation of all its services and this system is monitored by the Management Board of Service Directors. Appropriate risks associated with the LIP proposals will be added to these central registers.

4.75 In order to ensure that potential risks are identified throughout the lifecycle of this LIP, Bexley's approach is to:

- Adopt a robust prioritisation process taking into consideration the Council's transport and corporate objectives, as well as the MTS goals;
- Identify risks, opportunities and uncertainties to assist decision making;
- Identify suitable mitigating measures in the event of slippage;
- Provide on-going review and reporting.

4.76 This process, that will involve, amongst others, finance, resources, delivery schedule and outcomes, is separate from the Performance and Monitoring Plan, but the two will be inter-linked.

4.77 There are two distinct levels in this process:

- (a) Individual/policy level risks: A risk register will be maintained for each scheme being implemented, with the level of information recorded proportionate to the size and complexity of the scheme.
- (b) Programme level risks: The table below identifies a range of risks to the delivery of the overall LIP programme that could be encountered, and mitigation measures that would assist with the achievement of outcomes.

4.78 As part of the risk assessment process, programme delivery will continue to be monitored at bi-monthly meetings, in order to identify and resolve any problems at an early stage. If it becomes apparent that there are significant risks to timescales and/or costs, scheme development and implementation work may be re-prioritised so that abortive costs are kept to a minimum.

Table 4.4: Programme Risks and Mitigation Measures

Risk	Mitigation Measure(s)
Resource to plan, design and implement the programme	Work planned in conjunction with term consultant and contractor Reserve list of schemes in place, to ensure efficient use of resources, should other schemes be delayed
Policy compatibility	A spread of schemes across policy areas will ensure that the full range of intended objectives, targets and outcomes are delivered. Elected Members are closely involved in scheme prioritisation and programme approval.
Delays to progress of work	Timescales for delivery allow time to develop a scheme, undertake any required consultation and address any issues identified Stakeholder consultation is undertaken at an early stage
Cost increases/ budget reductions	Project costs are monitored and reviewed internally on a regular basis and any variants in cost are escalated to the relevant capital programme manager. Permission to transfer funds from one budget to another may then be given, to ensure that the highest priority projects are completed, whilst staying within the overall budget Where a scheme experiences delays, funding will be transferred to the next highest priority scheme.
The estimated Integrated Transport budget is expected to be supplemented by contributions from developers	Scheme identification is influenced by consultation with all key stakeholders, particularly businesses and residents. Consultation is undertaken in advance of scheme development, to address any fundamental issues at an early stage. Consultation is also undertaken on the detailed design of the schemes before implementation.



Performance Monitoring Plan & Consultation

Chapter 5 Performance Monitoring Plan

Introduction

5.1 This chapter sets out the framework for monitoring performance in delivering the LIP objectives. It identifies a number of targets and indicators, explaining how these targets have been developed with a view to ensuring delivery of outcomes set out in the MTS at a borough level. This will also form the basis of the annual LIP performance and progress reports.

5.2 Transport for London (TfL) has provided benchmarking data for London boroughs in regard to each of these targets and indicators. This was intended to assist in target setting, by providing an indication of what has been achieved in other comparable boroughs. Baseline data has been derived from the Travel in London Report 3.

Target setting

Locally specific targets and performance indicators related to Mayor's Transport Strategy

5.3 TfL, in its LIP Guidance, has indicated mandatory indicators relating to five core targets, namely, mode share, bus service reliability, asset condition, road traffic casualties and CO₂ emissions. Boroughs are required to set locally specific targets – for both 20013/14 and longer term - in respect to each of these.

5.4 In developing the Borough's LIP targets, the following issues have been given careful consideration:

- a realistic balance between aspirations and the practicalities of achieving the targets, particularly in light of available LIP funding levels;
- the delivery of the transport programmes and schemes described in the earlier chapter;
- perceived constraints in achieving the targets including particular local circumstances.

5.5 The schedule of Bexley's performance indicators and targets and a summary of the Borough's Performance Plan are shown in Tables 5.1. The baseline data and delivery milestones are derived from TfL's data and guidance respectively. The subsequent paragraphs describe an analysis of the performance indicators listed by TfL (and illustrated in Table 5.1 above) and the Council's policy initiatives towards measuring performance.

5.6 In addition, as required by the LIP Guidance, a completed form (termed Proforma 'B' in the Guidance) is provided at the end of this chapter, giving details of each target set, including the base year and baseline

data, the target year and target outcome, and trajectory (showing the projected rate of progress between the baseline and 2013/14) information. The trajectories are also shown in the detailed analysis of each of the targets.

Mode Share

5.7 To encourage the development of Travel Plans by the larger employers in the Borough, the Council has produced and distributed a video and holds regular discussions with the businesses. The measurement of success will be a percentage reduction in car travel as shown by before and after studies. The percentage reduction to be targeted will depend on the size, location and type of the particular site. Travel Plans will be required to specify specific targets and monitoring proposals. There is a need to monitor travel to work trends in order to determine whether or not a transfer from the car to other forms of travel is taking place. The Council has prepared a Staff Travel Plan for its own employees and the results of travel pattern surveys will be used to measure modal transfer. The Council also commissions from time to time pedestrian flow counts in its major town centres. Cycling target has been reviewed while carrying out the Biking Borough study.

5.9 An integral part of the Council's School Travel Plan programme is the use of the before and after data to monitor changes in travel mode. The targets to be set for each scheme will take account of the location, proximity of public transport and other local factors and will take the form of percentage reduction in car trips. Discussions take place with London Transport Buses to provide more dedicated school services and special journeys on existing routes at school peaks. The effectiveness of these new services will be measured by surveys of changes in pupil travel patterns. The Council's Road Safety Unit employs a School Travel Coordinator who regularly reviews progress in the formulation of travel plans by the schools in the Borough. This also takes account of the Sustainable Transport Strategy for Schools.

5.9 Tables 5.2 and 5.3 provide details related to Bexley's target for two sustainable travel modes: cycling and walking. Existing baseline information is derived from TfL's Travel in London Report 3.

Table 5.1 - Schedule of Performance Indicators and Core Targets

Description	Units	Source/Reference	Proposed target	Borough LIP Objective	MTS Goals
1. Mode share					
(a) Cycle trips	Percentage share of trips by all modes	Borough Cycling Strategy LIP Guidance, MTS	Achieving a 3.0% modal share by 2031 (long term target) Target trajectory 1.4% by 2014 (short term target)	<ul style="list-style-type: none"> • Work towards an improved transport system • Support residents, visitors & businesses in choosing sustainable modes of travel 	<ul style="list-style-type: none"> • Improve transport opportunities for all Londoners
(b) Walking			28.5% modal share by 2025/26 (long term target)	<ul style="list-style-type: none"> • Improve & enhance access to jobs, services, health & leisure facilities 	<ul style="list-style-type: none"> • Reduce transport's contribution to climate change and improve its resilience
(c) School journeys		Sustainable Transport Strategy School Travel Plans	Increase shift away from car use each year	<ul style="list-style-type: none"> • Reduce the Borough's carbon footprint from transport 	<ul style="list-style-type: none"> • Enhance the quality of life for all Londoners
2. Bus service reliability	Excess wait time for high frequency routes	LIP Guidance TfL published standards	EWT not exceeding 1.1 minutes till 2017/18 Improve reliability Increase passenger numbers	<ul style="list-style-type: none"> • Work towards an improved transport system • Secure a more comprehensive, high-quality & integrated public transport system • Support residents, visitors & businesses in choosing sustainable modes of travel • Improve & enhance access to jobs, services, health & leisure facilities • Reduce the Borough's carbon footprint from transport 	<ul style="list-style-type: none"> • Support economic development and population growth • Enhance the quality of life for all Londoners
3. Asset condition	Proportion of total length of principal roads in need of repair	Guidance on Local Transport Plans.	5.7% by 2017/18 Target trajectory 5.3% by 2013/14 (short term target)	<ul style="list-style-type: none"> • Work towards an improved transport system • Improve & maintain existing transport infrastructure • Promote the safety & security of road and transport users • Improve & enhance access to jobs, services, health & leisure facilities 	<ul style="list-style-type: none"> • Support economic development and population growth • Enhance the quality of life for all Londoners
4. Road casualty reduction	Numbers	LIP Guidance Bexley Annual Road Safety Plan	KSI: 9% below the 2007-2009 baseline by 2013; 30% by 2020 All categories: 6% below the 2007- 2009 baseline by 2013; 20% by 2020	<ul style="list-style-type: none"> • Promote the safety & security of road and transport users • Improve & enhance access to jobs, services, health & leisure facilities 	<ul style="list-style-type: none"> • Improve the safety & security of all Londoners
5. CO₂ emissions	Tonnes of CO ₂ emissions from ground-based transport	Mayor's Air Quality Strategy Bexley's Climate Change Strategy	16% reduction by 2013 from the baseline in 2008	<ul style="list-style-type: none"> • Reduce the Borough's carbon footprint from transport 	<ul style="list-style-type: none"> • Enhance the quality of life for all Londoners • Reduce transport's contribution to climate change and improve its resilience

Table 5.2: Mode Share: Increase of cycling trips

Target:	1.4% increase by 2013/14 (short term target); 3.0% by 2031 (long term)
Data source	London Travel Demand Survey
Target trajectory	Linear projection indicated in figure below.
Existing 2010 Baseline	1% mode share 2007/08 to 2009/10 average (LTDS)
Evidence that the target is realistic and ambitious	<p>TfL have recognised in the Benefits of Cycling in Outer London that Bexley is in the bottom 5 Boroughs for potentially cycleable trips. It is estimated that 22% of trips by mechanised modes in Bexley are potentially cycleable compared to 35% in London as a whole which indicates targets for cycling in Bexley should be lower than the wider London target.</p> <p>The Mayors Target is for a 5% mode share in cycling by 2026. For outer London Boroughs a mode share of 4.3% by 2026 is intended as a rough guide. This would appear an unrealistic target for Bexley to achieve. This is due to the available infrastructure, levels of access to a bike and local attitudes to cycling as an analysis of the LTDS data would show.</p> <p>Accordingly, the Bexley Cycling Strategy and Action Plan prepared under the 'Biking Borough' initiative of TfL in May 2010 sets 3% modal share by 2030. This target is recognised as both realistic and ambitious. Within this framework the Borough aims to achieve an increased modal share in cycling of 1.4% by 2013/14</p> <p>The target set for Bexley is to achieve 1.40% within the next 3 years. This target will be monitored at the end of 2013/14 by reviewing the sources as noted below.</p>
Key actions for the Council and any local partner, if applicable	<p>Bexley, as mentioned earlier, has joined the Mayor's Biking Borough initiative and has formulated a revised Cycling Strategy and Action Plan. The Borough's delivery actions to increase the share of cycling as a mode of travel are already described in Chapter 4. For monitoring purpose, it is intended to analyse LTDS data, school travel plans, ITrace, Census (post 2011) and any additional local cycle counts.</p> <p>Additionally the Council will continue to work with other organisations to promote cycling such as NHS, Sustrans, LCC, Bike It and Sport England.</p>
Principal risks and how they will be managed	<p>Lower than expected level of behavioural change and unexpected levels of increases in traffic. Enhancement of public realm improvement schemes would provide mitigating opportunities..</p> <p>Another risk arises if funding for future schemes under Smarter Travel is significantly reduced. This may require efforts to attract funding by private developers whenever appropriate.</p>

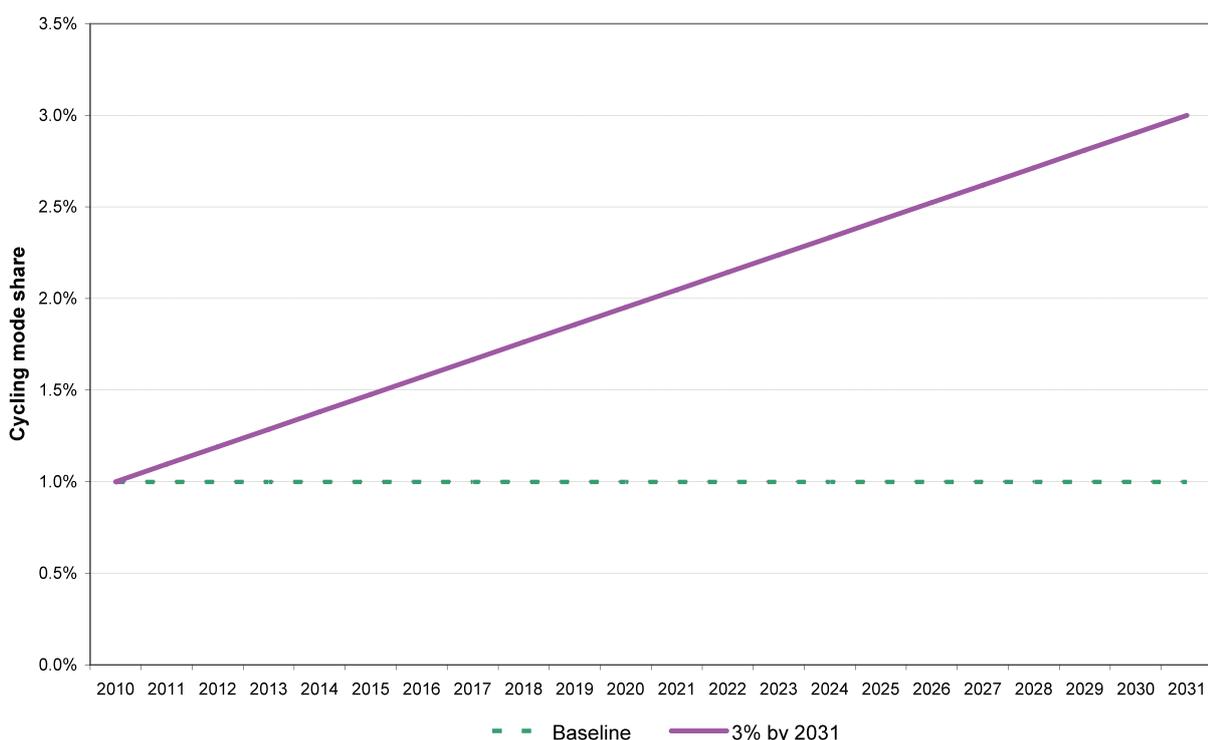
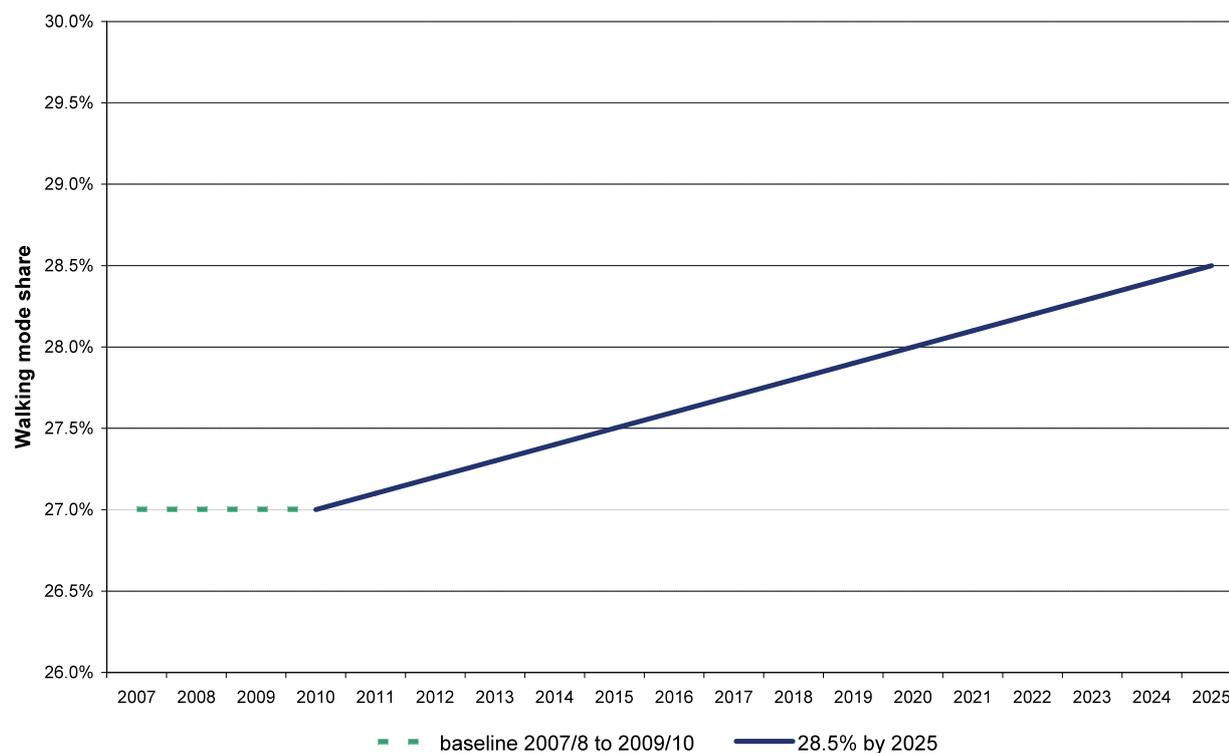


Table 5.3: Mode Share: walking trips

Target: Increase the % of journeys by foot to 28.5% by 2025/26(long term target)	
Data source	London Travel Demand Survey
Target trajectory	Indicated in figure below
Existing 2010 Baseline	27% mode share in 2007/08 to 2009/10 (LTDS)
Evidence that the target is realistic and ambitious	<p>Based on LTDS Data it can be seen that Bexley is ranked 16th out of 19 Outer London Boroughs in the number of trips made by walking, within the bottom quartile. Increasing the number of walking trips made by residents is a real ambition for Bexley as recognised within the delivery plan where commitments have been made to Walking and Accessibility schemes. These schemes will have an expected outcome of a) identification of walkability constraints and b) improvements to the pedestrian environment in the Borough.</p> <p>The target for walking mode share has been set at a 1.5% increase by the Mayor for both inner and outer boroughs. Bexley would welcome the opportunity to be ranked higher in the number of walking trips per borough but recognises the pressure on future allocations. However, Bexley will set a walking target which is in line with the Mayors target of 1.5% by 2025. This is a realistic target for Bexley to achieve considering it is a large outer Borough with poor access to public transport, and will also include provision for continued audit and studies for future schemes.</p> <p>This target will be monitored at the end of 2013/14 by reviewing the LTDS</p>
Key actions for the Council and local partners, as applicable	<p>The delivery actions described under Objective 6 in Chapter 4 deals with the policies and actions to promote walking and improve the provision for it.</p> <p>Schools and local walking groups have an important role. The Borough will also work with external organisations such as 'Living Streets' to encourage walking.</p>
Principal risks and how they will be managed	<p>Lower than expected level of behavioural change and unexpected levels of increases in traffic. Enhancement of public realm improvement schemes would provide mitigating opportunities.</p>

Target trajectory



Improving bus journey reliability (Target 2)

5.10 In the recent past, the national system of Best Value Performance Indicators for local bus services was based on the general role of local authorities. Transport for London has responsibility for local bus services and had been advised of the difficulty for London boroughs providing certain statistics to comply with the relevant Best Value Performance Indicators. The greatest problem is that data is analysed for total routes. It needs to be sub-divided to borough level as most routes pass through two or more London boroughs. TfL routes generally traverse two or three boroughs, or parts thereof.

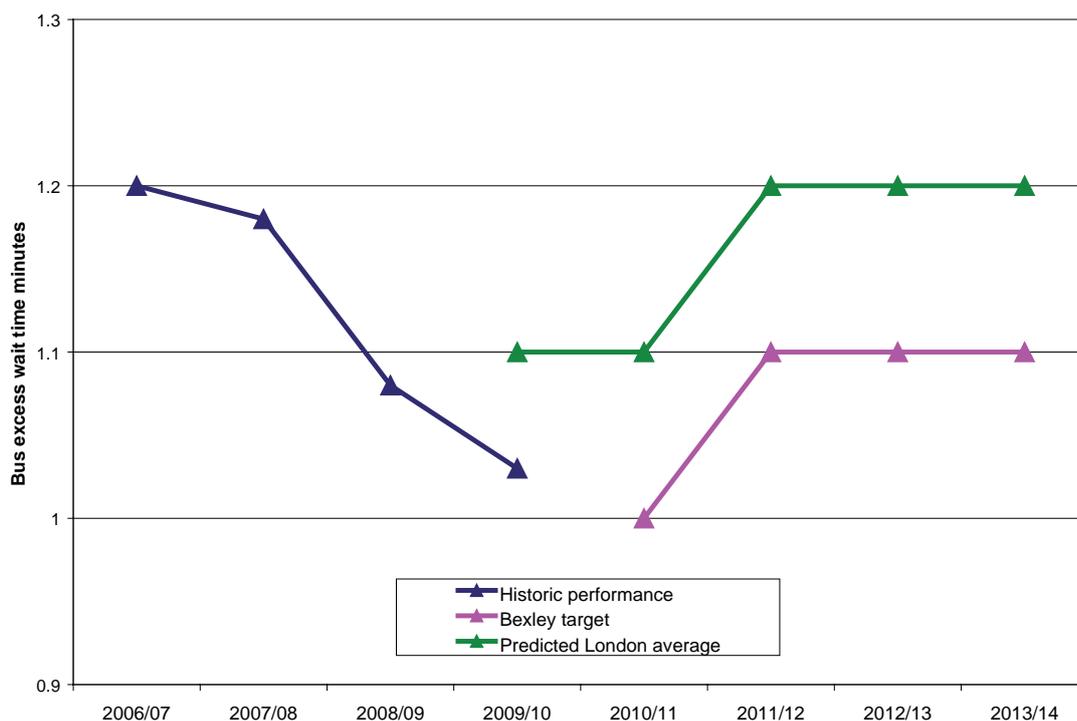
5.11 The monitoring of bus services is carried out through the Quality of Service Indicators produced quarterly by London Transport Buses for each route. Supplementary studies are also carried out on individual problems. In addition the number of passengers carried will be measured. The quality of the network, will be assessed by passenger reaction surveys. Where bus priorities are introduced monitoring will be by means of before and after surveys of journey times with a target of improvement, the actual amount being dependant on the particular scheme. Deregulated coach services serving stops in the Borough are not monitored. The method of collecting data on EWT is scheduled to switch to iBus in the future.

5.12 Table 5.4 gives the details concerning this target.

Table 5.4: Excess wait time (EWT) for all high-frequency bus services

Target: Maintain EWT to 1.1 minutes until 2017/18	
Data source	QSI observations/iBus data
Target trajectory	Shown in figure below
Existing 2010 Baseline	1.0 minutes
Evidence that the target is realistic and ambitious	<p>The baseline year is 2009/10 for which the average EWT in Bexley was 1.0 mts; reducing to 1.1 in 2008/09. Predictions published in the Business Plan show that across London, the EWT is expected to increase from 1.1 to 1.2 between 2010/11 and 2011/12, and stay at that level till 2017/18.</p> <p>Evidence shows that the EWT for Bexley is less than the average across London, therefore it is likely that any increase in EWT will be less than in the TfL Business Plan. The target for Bexley will be to maintain EWT at no higher than 1.1 mts up to the year 2017/18, which is lower than the forecast figure in TfL's Business Plan.</p>
Key actions for the Council	<p>The Council has implemented a number of schemes that have helped to improve bus reliability in the past such as parking restrictions to control indiscriminate parking on bus routes and linking of traffic signals to reduce congestion on bus routes. The Council will continue to identify and propose similar schemes in the future. Bexley will continue to implement measures to make bus stops accessible. The Council will continue to meet all bus operators quarterly to review bus performance and identify any issues acting to the detriment scheduled services.</p>
Key actions for local partners	<p>Local partners, including TfL and operators, will have a key role to play in helping to achieve performance and identify areas for improvement.</p>
Principal risks and how they will be managed	<p>Increased traffic congestion may impede performance. The Council continually monitors congestion and seeks to rectify its causes as part of its Network Management duty. Individual operators may not always deliver the required level of performance. The Council will continue to monitor Quality of Service indicators and hold low performing operators to account.</p>

Target trajectory, Excess wait time (EWT) for all high-frequency bus services



Asset condition: bringing transport infrastructure to a state of good repair (Target 3)

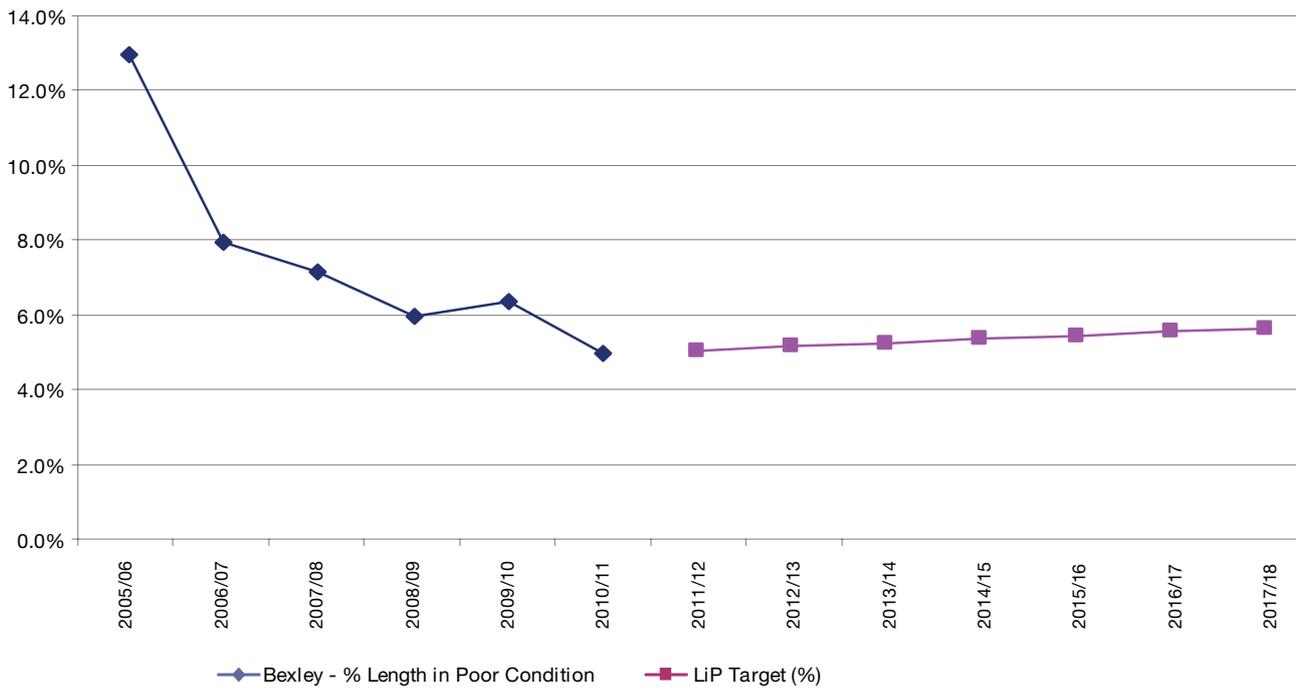
5.13 The structural condition of principal roads will continue to be monitored by the use of deflectograph surveys, the high speed road monitor. The target is to reduce the percentage with zero residual life and

of defective areas. SCRIM surveys will continue to be carried out on all classes of road on a two year rolling programme. In addition, bridge inspection is targeted at 100% of programmed inspections. The Council has a target of carrying out all identified bridge assessment and strengthening maintenance work per annum.

Table 5.5: Highway Asset Condition

Target:	Keep the % of Principle Road length in need of repair below 6.0% over the period of 2010/11 to 2017/18, subject to continued funding
Data source	Detailed Visual Inspection data
Target trajectory	As indicated in figure below
2010 Baseline	6.4% in 2009/10
Evidence that the target is realistic and ambitious	Based on DVI indicators it can be seen that Bexley is ranked 14th compared to all London boroughs. It is ranked 7th in reducing the length of highway needing repair over time. As Bexley has the second largest Principal Road Network in London, its efforts in utilising LIP allocations in highway maintenance and improvement have been clearly effective. Bexley would welcome the opportunity to reach the upper quartile but recognises future funding constraints. In the event of current funding level reducing significantly, the target for 2017/18 may not be achieved. This is particularly important in the light of TfL's London-wide projection indicating that 11% of the carriageway would be considered for structural maintenance by 2013/14. A review of the historical % length of poor condition would suggest that this target is both realistic and ambitious.
Key actions for the Council and local partners	Maintain a robust Asset Management Plan and continue to improve the condition of both the principal roads and Borough roads network in Bexley. Ensure that the maintenance is carried out in a realistic timeframe with available funding.
Principal risks and how they will be managed	Unusual weather conditions may require additional work. Any unforeseen delays with the Borough's term contractor to undertake the necessary works is also a factor. This is managed by ensuring forward plans are agreed by the relevant Cabinet Member each December ready for implementing the following financial year.

Target trajectory: Highway Asset Condition



Reducing road traffic casualties (Target 4)

5.14 The Council measures progress on road casualty reduction against national targets and its own locally established ones. These targets and the Council's success in achieving them are set out in detail in the

Road Safety Plan. Bexley's baseline situation and current performance in achieving targets are explained in Chapter 3 (paragraphs 3.69 to 3.71 and attached figures). Table 5.6 below summarises the position.

Table 5.6: Road Traffic Casualties – KSIs

Target:	9% below the 2007 to 2009 baseline by 2013 (79 KSIs in the short term); 30% by 2020 (61 KSIs in the long term)
Data source	London Road Safety Unit
Target trajectory	Shown in Figure below..
Existing Baseline	87 KSIs (2007 to 2009 three-year average)
Evidence that the target is realistic and ambitious	In November 2001 the London Road Safety Plan set a target for a 40% reduction in KSIs. The 2007 to 2009 average for KSIs in Bexley meets and slightly exceeds that target. To date the National Indicator has not been set. Notwithstanding random variations, the overriding trend in Bexley has been for casualties to decrease since 1990. Between 1994-1998 average to 2009, there has been a reduction of 44%. It is anticipated that this trend will continue into the future although the rate of decrease will reduce as the number of identifiable collision clusters and "at risk" user groups reduce and the zero point is approached. The Transport for London Business Plan includes ambitious KSI targets for each year and these have been adopted in Bexley's LIP. The target is taken from 2007 – 2009 baseline. The 2013 target is significantly below a logarithmic projection of the figures for the previous six years so the target is onerous.
Key actions for the Council	The planned delivery actions to achieve this target are listed in Chapter 3, under paragraph 3.73
Key actions for local partners	Local partners including the Police, health services, and local schools will need to support policies for improving road safety and implement their own initiatives. TfL, in particular, has a leading role to play in reducing casualties on the TLRN.
Principal risks and how they will be managed	The principal risks to the achievement of this target include delays to the implementation of safety schemes, and increases in traffic levels above forecast. These will be managed by reviewing collision and road user group patterns and our programme continuously, to enable expenditure to be focused where needed.

KSI target trajectory to 2020 (all roads including TLRN)

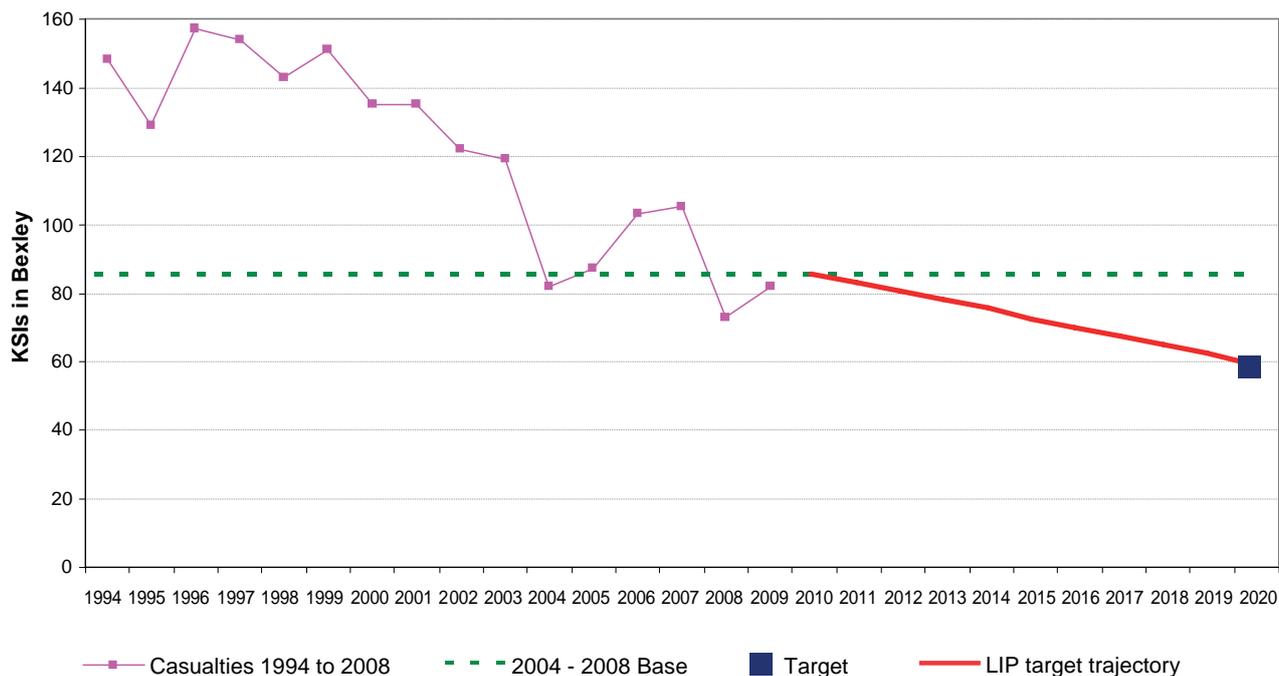
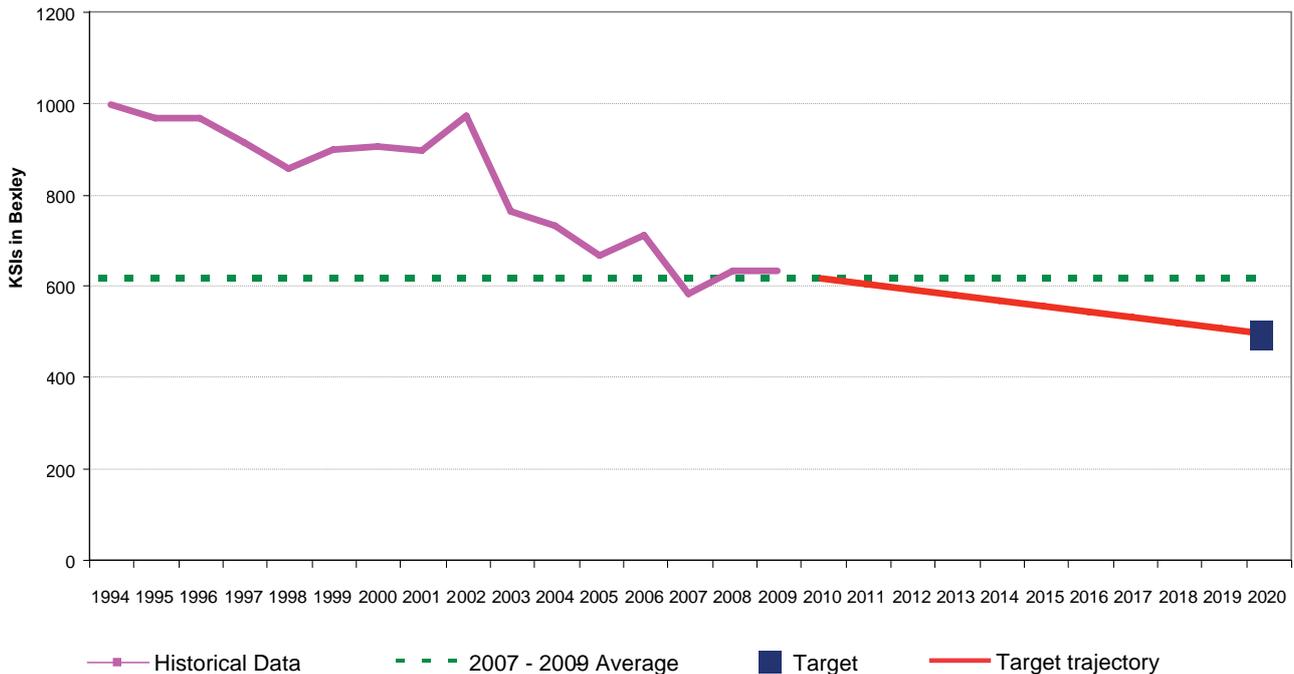


Table 5.7: Road Traffic Casualties – Total of all categories

Target:	6% below the 2007–2009 baseline by 2013 (578 casualties in the short term); 20% reduction by 2020 (492 casualties in the long term)
Data source	London Road Safety Unit
Target trajectory	Indicated in Figure below.
Existing Baseline	615 (2007 to 2009 three-year average)
Evidence that the target is realistic and ambitious	Total casualties represents the total of three separate categories (Killed, Seriously Injured and slight), for which there is no national or regional target. Notwithstanding random variations, the overriding trend in Bexley has been for casualties to decrease since 1990. It is anticipated that this trend will continue into the future although the rate of decrease will reduce as the number of identifiable accident black spots reduces and the zero point is approached. The LIP target requires the Borough to continue the previous trend.
Key actions for the Council	The planned delivery actions to achieve this target are listed in Chapter 3, under paragraph 3.72
Key actions for local partners	Local partners including the Police, health services, and local schools will need to support policies for improving road safety and implement their own initiatives. TfL, in particular, has a strong role to play in reducing casualties on the TLRN.
Principal risks and how they will be managed	The principal risks to the achievement of this target include delays to the implementation of safety schemes, and increases in traffic levels above forecast. These will be managed by reviewing accident patterns and our programme continuously, to enable expenditure to be focused where needed.

Target trajectory: All Casualties



Reducing Carbon emissions

5.15 The London Borough of Bexley's policies to address the MTS challenge to improve air quality have

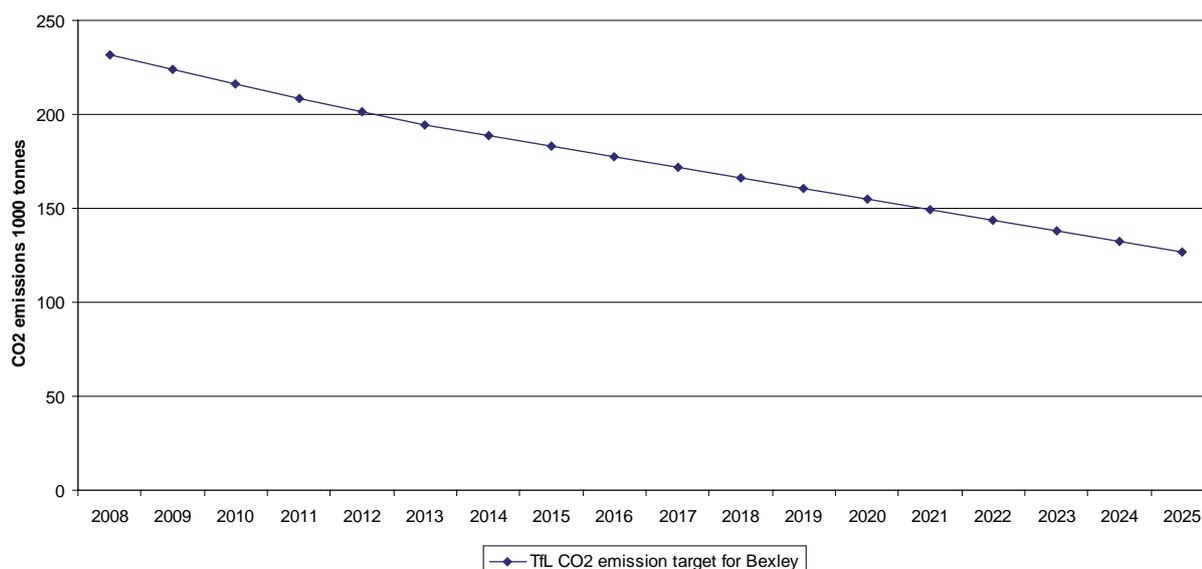
been stated in paragraphs 3.61 and 3.62 in Chapter 3. Within this context, Table 5.8 provides the necessary details related to core target for CO₂ reductions.

Table 5.8: Reductions in CO₂ Emissions

Target:	16% reduction in CO ₂ emissions by 2014 (short-term); 45% reduction by 2025 (long term)
Data source	London Energy and Greenhouse Gas Inventory (LEGG)
Target trajectory	Indicated in figure below
Existing 2008 Baseline	232,000 tonnes of CO ₂ emissions from ground-based transport in 2008
Evidence that the target is realistic and ambitious	Based on the data supplied by the Department of Energy and Climate Change (DECC) for the last 3 years prior to the Base year 2008, Bexley has higher levels of CO ₂ emissions compared to Greenwich but significantly lower than Bromley and Havering. This would put Bexley somewhere in the middle in terms of its CO ₂ emissions for an outer London Borough. Historically Bexley has performed well in terms of CO ₂ reductions. It would equate to some 3% to 5% annual reduction. Between 2008 and 2009, there was a 5% reduction in ground-based transport emissions. Considering this historical trend has occurred in recent years and that the DECC data is not too dissimilar to the LEGGI data, Bexley is inclined to follow the target set by TfL for CO ₂ emissions reductions and try to achieve the Mayors' long-term reduction of 60% in the long run. However, as a borough with high car ownership and relatively inadequate public transport facilities, this aspiration will require considerable efforts and resources and hence a more realistic target is set.
Key actions for the Council and local partners as appropriate	Paragraphs 4.39 and 4.30 in Chapter 4 explains Bexley's delivery actions to achieve this target and the Council's LIP objective 10. An Environmental Sustainability Board comprising public and private sector organisations is involved in this issues.
Principal risks and how they will be managed	Resource constraints in setting up the necessary monitoring stations and delay in providing improvements to the public transport facilities pose a risk. Progress will, therefore, be regularly reviewed.

Target trajectory: CO₂ Emissions

TfL CO2 emission target for Bexley



Performance Management

5.16 In accordance with its corporate 'Bexley Performance Plan', the London Borough of Bexley had earlier prepared a monitoring framework that sets targets for policy initiatives and measures performance for both individual schemes and broader strategic objectives. This is now going to be superseded by a new approach to corporate planning, entitled Bexley Business Process.

5.17 This approach is lean and streamlined, centred around the Council's priorities and based on:

- Members' experiences as elected representatives and policy makers
- Residents' and Customer feedback – both at an individual service level and in terms of structured, ongoing measures of satisfaction
- Key deliverables under Strategy 2014 – particularly efficiency objectives and priority change projects
- Statutory responsibilities and targets (Ofsted, CQC, Defra, Equalities)
- Other service area priorities, policies and programmes

5.18 These priorities are delivered through a series of service planning documents which are short, clear and concise, focus on how to achieve the key priorities and are accompanied by a set of locally determined critical performance indicators which demonstrate success. This new framework will be implemented from April 2011 and full details will be published in the Performance Management Toolkit in Spring 2011 alongside copies of the service planning documents.

5.19 Within this framework, Bexley intends to monitor and evaluate progress in achieving LIP targets regularly and systematically. Any slippage will be carefully analysed taking into consideration the causes and mitigating measures identified. Performance will be monitored by the Cabinet Member and the appropriate Overview and Scrutiny Committee.

Preforma 'B': Locally specific targets for mandatory indicators

Borough: Bexley

Core indicator	Definition	Year type	Units	Base year	Base year value	Target year	Target year value
Mode share of residents	% of trips by walking	Financial	%	2007/08 to 2009/10	27	2025/26	28.5
Mode share of residents	% of trips by cycling / no of trips	Financial	%	2007/08 to 2009/10	1	2031	3.0
Bus service reliability	Excess wait time in mins	Financial	Mins	2009/10	1	2017/18	1.1
Asset condition - principal roads	% length in need of repair	Financial	%	2009/10	6.4	2017/18	5.7
Road traffic casualties	Total number of people killed or seriously injured	Calendar	Number	2007/09	87	2020	61
Road traffic casualties	Total casualties	Calendar	Number	2007/09	615	2020	49215
CO ₂ emissions	CO ₂ emissions	Calendar	Tonnes/year	2008	232	2025/26	128

Trajectory data		Trajectory data			Data source
2010/11	2011/12	2012/13	2013/14		
27	27.1	27.2	27.3		LTDS
1	1.1	1.2	1.4		Specify LTDS or borough's own screenline counts
1	1.1	1.1	1.1		iBus
5	5.1	5.2	5.3		Detailed Visual Inspection (DVI) data supplied for each borough to TfL by LB Hammersmith and Fulham
87	84.4	81.8	79.2		London Road Safety Unit
623	602.7	590.4	578		London Road Safety Unit
216	209	201	194		GLA's London Energy and Greenhouse Gas Emissions Inventory (LEGGI)

Chapter 6 Consultation

Introduction

6.1 Bexley has a well-established practice of conducting consultation on the formulation of policies and proposals for implementation. Indeed, consultation is at the heart of the Council's service delivery policy. It allows the Council to inform its policies and priorities and determine what the local community thinks about how it should be delivering services. It has, therefore, been the Council's clear intention to carry out such an exercise on the LIP with all concerned.

6.2 Under Section 145 of the GLA Act 1999, the Council is required to consult with the following in finalising its LIP:

- The Metropolitan Police Authority
- Transport for London
- Such organisations representative of disabled people as the Council considers appropriate
- Each other London borough whose area is likely to be affected by the Plan.

6.3 In regard to local consultees, this included Bexley Access Group (local mobility forum), Bexley Chamber of Commerce and Business Focus Group, the LA21 Traffic and Transport Group and the neighbouring local authorities, eg Kent County Council, Dartford Borough Council and Sevenoaks District Council.

6.4 The consultation exercise was launched immediately after submitting the Draft Lip to TfL on 20 December 2010 and lasted until March 2011. A consultation questionnaire was designed and distributed to help respondents in seeking their views on the contents of the Draft LIP and to provide a framework for analysis. This is attached at the end of this chapter. A copy of the Consultation Draft LIP was also sent to libraries, appropriate Cabinet Members, and Scrutiny Group Members of the Council, neighbouring local authorities and TfL. The Draft LIP was also published on the Council's website to maximise the opportunity to comment and to increase the level of response.

6.5 A presentation on the LIP was given to the Bexley Environmental Sustainability Board, consisting of representatives of Natural England, Environment Agency, Thames Water, London Fire Brigade, South London Healthcare Trust, LA 21 Transport Group, Orbit Housing Association, Bexley Care Trust, businesses, school's representative and Council Members.

6.6 In addition, the Draft Strategic Environmental Assessment of the LIP carried out by independent specialist consultants was circulated for consultation with statutory stakeholders – the Environment Agency, English Heritage and Natural England.

6.7 The feedback from this consultation was carefully taken into consideration in finalising the LIP document. A summary of the results of this consultation exercise and a list of the consultees are given below.

Summary of consultation feedback

6.8 No comments were received from any of the neighbouring boroughs. During the preparation of the LIP, an informal discussion was conducted with the London Borough of Greenwich and ideas were exchanged.

6.9 Kent County Council indicated its general agreement with most aspects of the LIP. It shares Bexley's concern about the termination of Crossrail 1 at Abbey Wood and would like to work with Bexley to secure the delivery of its extension to Gravesend. Kent also shares Bexley's aspiration to improve public transport links between the Borough, Bluewater and Darrent Valley Hospital. Kent is interested in the provision of a Lower Thames Crossing to the east of Gravesend and would have liked Bexley's LIP to mention the 'detrimental economic and environmental impacts of congestion and delay at the Dartford crossings'.

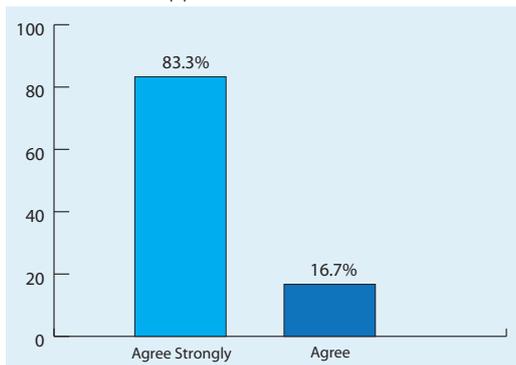
6.10 The LA 21 Transport/Traffic Forum would like to see improvements made to rail and other modes of public transport, but recognises funding constraints. It attaches highest priority to Objective 4 of the LIP, followed by Objectives 9 and 2. In improving north-south links within the Borough, its first preference is for a direct link to the London Underground network followed by a separate light rail transit from Woolwich Arsenal or Abbey Wood to Bexleyheath. Improved bus services is its lowest preference. With regard to delivery actions in the LIP, this forum attaches relatively more importance to securing better accessibility in the deprived north of the Borough and in station access improvements and continued improvement of the road network.

6.11 The Bexley London Cycling Campaign (BLCC) expressed its happiness on the LIP's emphasis on encouraging sustainable travel and ensuring safety for all road users. It showed some concern about the use of cycle parking standards in the north of the Borough. However Bexley's' response has been that the parking standards are indicated in the Council's Local Development Framework and the LIP does not set any other standard. As regards the BLCC's comment on the 'low and unambitious' target for modal share of journeys by cycle, the Council's targets were determined in the recently formulated Cycling Strategy under the Biking Borough initiative and the baseline shown in Travel in London Report 3 and BLCC was consulted in this exercise. However, it is agreed that short journeys to work in the Borough have the potential for modal shift to cycling and walking and it is certainly intended to increase awareness in this regard and improve and enhance the provision of necessary facilities, as reflected in the delivery action schemes described in the Programme of Investment.

Feedback from members of the public

6.12 Three of the five questions in the consultation questionnaire distributed to the Borough residents dealt with the Borough's transport challenges and objectives whilst the remaining two related to LIP proposals and delivery actions.

6.13 Over 83% of the respondents strongly agreed that as an outer London borough a challenge for Bexley is to improve and enhance public transport capacity in the Borough while maximising the current rate of utilisation and opportunities for sustainable travel.

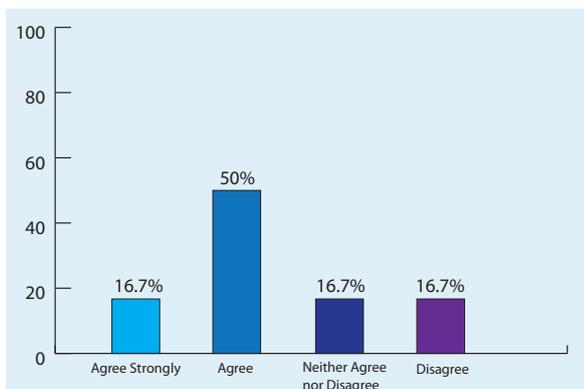


6.14 Half of the respondents placed top priority to LIP Objective No.1. Preference for the nine other objectives varied considerably, with no clear pattern emerging. **However, there was no disagreement with any of the LIP transport objectives.**

6.15 With regard to the means for improving the Borough's north-south links, 50% of the respondents desired a direct link to the London Underground network. A separate light rail link to Bexleyheath from Woolwich Arsenal received the next level of support.

6.16 Turning to the delivery actions, station access improvement and promotion of smarter travel modes received relatively more support.

6.17 Most respondents agreed that Bexley's priorities in LIP proposals should strike a balance between local needs and aspirations and MTS goals.



Feedback from TfL

6.18 Prior to the formal submission of Bexley's Consultation Draft LIP, partial draft of the document encompassing Part 1 (Borough context and transport objectives) was circulated to the relevant officers of TfL and a meeting was held to discuss their views. This proved helpful. A further meeting was held following the comments received on the Consultation Draft.

6.19 TfL was happy that Bexley's LIP indicated clear links between all relevant national, regional and local strategies/plans and the local transport objectives, including the Strategic Environmental Assessment and Equality Impact Assessment. They also considered that adequate evidence had been provided to establish the local and sub-regional issues affecting the Borough. However, a commitment was needed to be stated to indicate that all the LIP objectives would be delivered over the timescale of the MTS. This has been done in this final document.

6.20 With regard to Part 2 (Delivery Plan), more detailed information was asked for concerning the types of intervention, timescale, prioritisation, sources of funding and the Mayor's High-profile Outputs. The current document addresses all these issues.

6.21 Further clarifications and some amendments were sought in regard to Part 3 (Chapter 5: Performance Management Plan). Accordingly the baselines and targets have been reviewed and revised with reference to the latest Travel in London Report 3.

6.22 A new section on the results of the consultation was asked for and this section of the document presents the requisite information.

List of Consultees

London Borough of Greenwich
 London Borough of Bromley
 London Borough of Havering
 London Borough of Barking and Dagenham
 London Borough of Lewisham
 London Borough of Tower Hamlets
 Kent County Council
 Dartford Borough Council
 Highway Agency
 Network Rail
 Environmental Sustainability Board
 Metropolitan Police (Bexley Borough Commander)
 Bexley Business Partnership
 Bexley Association of Disabled People
 Bexley Local Agenda 21 UK: Traffic/Transport Forum
 Bexley Environmental Sustainability Board
 Erith Forum

London Borough of Bexley

CONSULTATION QUESTIONNAIRE ON THE DRAFT SECOND LOCAL IMPLEMENTATION PLAN

Introduction

Over the next three months the Council will be finalising its Local Implementation Plan (which has to be agreed by the Mayor for London) for the borough to get funding for transport initiatives. The draft document has recently been published and can be viewed on the Council's website. We would like to have your views and this questionnaire has been designed to assist you in sending your comments. It summarises the key issues, policies and proposals described in the LIP. The results of this consultation will be carefully considered in finalising the Council's Second Local Implementation Plan (LIP). The Council may like to include in the Final LIP a summary of the feedback received on this consultation exercise. Unless you specifically state otherwise, your response will form part of this summary.

The LIP is a statutory document which all London boroughs are required to prepare under the Greater London Authority Act 1999. Under this Act, individual boroughs are obliged to implement the Transport Strategy of the Mayor of London (MTS). Bexley's transport initiatives and schemes in this LIP are intended to address local transport issues which are consistent with the MTS goals, policies and proposals.

When completing this questionnaire, please answer each question by ticking (✓) the relevant box(es). If you wish to make additional comments, please feel free to do so on a separate sheet of paper and attach this to the questionnaire.

Please send your completed questionnaire In the enclosed envelope – no stamp is required.



Topic 1: Borough Transport Challenges and Objectives

Q.1 As an outer London Borough outside the London Underground network, a challenge for Bexley is to improve and enhance public transport capacity in the Borough while maximising the current rate of utilisation and opportunities for sustainable travel. Do you agree?

Please one answer only:

- 1. Agree strongly
- 2. Agree
- 3. Neither agree nor disagree
- 4. Disagree
- 5. Disagree strongly
- 6. Don't know

If you disagree or disagree strongly, please give reasons.

.....

.....

.....

Q.2 Bexley's LIP has ten primary transport objectives:

- 1. Work towards an improved transport systems that support regeneration and economic development in the Borough;.....
- 2. Support growth needs in the Borough's spatial development strategy;.....
- 3. Secure a more comprehensive, high-quality and integrated public transport system to overcome the current constraints;.....
- 4. Maximise benefits of regional transport developments to fully utilise funded investment for improving the Borough's connectivity;.....
- 5. Optimise the efficiency of the existing transport networks and improve and maintain the existing transport infrastructure;.....
- 6. Support residents, visitors and businesses in choosing sustainable modes of travel to reduce the use of the car and traffic congestion leading to a better environment;...
- 7. Promote the safety and security of road and transport users;.....
- 8. Improve and enhance access to jobs, services, health & leisure facilities;.....
- 9. Make transport system accessible to all with a view to improving social inclusion;.....

10. Reduce the Borough's carbon footprint from transport to address the issue of climate change.....

Please indicate your priority for each of these objectives by numbering each of them, from 1 to 10 (where 1 indicates your top priority and 10 your least priority. You may like to give the same scores to more than one objectives.).

If you don't agree with any of these objectives, please indicate which one and briefly state your reasons

.....

.....

.....

Q.3 A challenge for Bexley is to improve and enhance north-south links within the Borough. The opportunities for addressing this issue are listed below.

Please score these options by inserting 1,2,3 and 4 (where 1 indicates highest score) in order of preference against each of the options:

- 1. A direct link to the London Underground network.....
- 2. A separate light rail transit from Woolwich Arsenal or Abbey Wood to Bexleyheath
- 3. Express bus services between Bexleyheath and North Greenwich station.....
- 4. Improved and enhanced bus services only

If you would like other options to be considered, please describe

.....

.....

.....

Topic 2: Bexley’s LIP Proposals and Delivery Actions

Q.4 In accordance with TfL’s guidance for the preparation of the LIP, it is important to identify a number of delivery actions that address MTS goals. Some of these are listed below and we would be grateful if you could prioritise these by ranking 1,2,3 etc (1 being the highest priority).

- Undertake public realm improvements to revitalise the Borough’s town centres.....
- Continue to improve the Borough’s road network.....
- Improve the walkability of town centres and access to local services.....
- Continue to implement road safety engineering measures to reduce road casualties.....
- Promote the use of smarter travel modes.....
- Station access improvement schemes.....
- Secure better accessibility in the deprived north of the Borough.....
- Implement the air quality action plans.....

Q.5 Do you agree that in prioritising Bexley’s LIP proposals a balance needs to be struck between local needs and aspirations and MTS goals?

Please tick one answer only:

- 1. Agree strongly.....
- 2. Agree.....
- 3. Neither agree nor disagree.....
- 4. Disagree.....
- 5. Disagree strongly.....
- 6. Don’t know.....
- 5. Disagree strongly.....
- 6. Don’t know.....

If you disagree or disagree strongly, please briefly give reasons.

.....

.....

.....

Thank you

Please return your completed surveys in the envelope provided, there is no need for a stamp.

Richard Hawkins
 Head of Transport & Traffic Services
 London Borough of Bexley
 Wyncham House
 207 Longlands Road
 Sidcup DA15 7JH

Email: Transportandtraffic@bexley.gov.uk



Appendices

Appendix I Equality Impact Assessment

Introduction

1. The London Borough of Bexley recognises the need to develop an inclusive transport system that takes account of the needs of all strands of the Borough's residents and visitors. Transport plays a key role in addressing social exclusion by providing access to jobs, education, services and facilities. As an integral part of the LIP, therefore, an Equality Impact Assessment (EQIA) is presented in this chapter.

2. As defined in TfL's guidance on Equality Impact Assessment (2004), this involves anticipating the consequences of transport policies and projects on 'equality target groups' and making sure that, as far as possible, any negative consequences are eliminated or minimised and opportunities for promoting equality are maximised. TfL together with the Mayor of London, the GLA and other functional bodies have defined equality target groups (ETG) as: women; black and minority ethnic people; young people and children; older people, disabled people; lesbians; gay men; bisexuals; transgendered and people from all faith groups.

3. The EQIA will assess two types of impacts on these groups:

An impact that will have a **positive impact** on an equality target group, or some equality target groups, or improve equal opportunities and /or relationships between groups.

A **negative or adverse impact** – where the impact could disadvantage one equality target group, or some equality target groups.

The Council's commitment to equality

4. The Equality Act 2010 introduced a new 'Public Sector Equality Duty' that brings together equality duties for race, disability and sex and also covers age, sexual orientation, religion or belief, marriage and civil partnership, pregnancy and maternity, and gender reassignment. As a council Bexley has to meet the Public Sector Equality Duty which means when it develops and delivers policies, services and functions it must give due regard to the need to:

- eliminate unlawful discrimination, harassment or victimisation
- advance equality of opportunity between different groups; and
- foster good relations between different groups

5. The Council is developing policies, procedures and equalities schemes supported by action plans to promote equality and prevent discrimination on the grounds of disability, ethnicity and gender and more recently on age, religion or belief and sexual orientation. Progress against the Council's Equality Schemes are monitored through the Council's Quarterly Monitoring Statements. In September 2009, Bexley achieved Level 4 under the Equalities Standard and through implementation of the Corporate Equality Action Plan strives towards excellence.

6. The Council is taking steps to make services more accessible and ensure take-up by all sections of the community.

- remove any barriers that prevent people from disadvantaged groups achieving their full potential as employees and prospective employees.
- conduct equality impact assessments of new and existing policies and practices to make sure that they do not unlawfully discriminate against any equality target group
- implement an Equality Action Plan to mainstream equality and diversity issues across all service areas.

7. In order to support its diverse workforce, the Council has set up a Black Workers' Group and Disability Support Group. These Groups make valuable contributions to the development of Council policies & procedures in order to help make services more responsive to the needs of all communities.

8. The Council has developed a Single Equality Scheme which includes an action plan to promote Race, Disability and Gender Equality in the Borough of Bexley. This scheme extends its work on equalities to cover the three other strands of equality covered by anti-discrimination legislation i.e. age, religion/belief and sexual orientation. The single equality scheme also ensures that all new and existing legislation continue to be firmly placed within the Council's strategic framework for service delivery and employment.

9. Bexley's Department of Strategic Planning and Regeneration (formerly Strategic Planning and Transport) contributes fully to corporate initiatives to ensure Council services and employment practices take into account the protected characteristics set out in the Equality Act 2010 (age, disability, gender, race/ethnicity, religious belief, sexual orientation, gender reassignment, marriage/civil partnership, and pregnancy and maternity). Most of the Department's services have conducted Equalities Impact Assessments of their services or new strategies, or both, and are implementing improvement plans.

EQIA of the Local Implementation Plan

Service aims and functions

10. The EQIA of the Local Implementation Plan (LIP) has been conducted with reference to the service aims and functions of the former Transport and Traffic Services Division, part of the Council's former Department of Strategic Planning & Transport.² These can be summarised as follows:

Overall aim: The broad function of the Transport and Traffic Services Division is to promote, coordinate and provide traffic and transportation services within the Borough that support the Council's Strategic aims. Some of these are statutory functions such as Road Safety, Road Traffic Reduction and contributing to the Mayor of London's Transport Strategy as well as the Government's policy options. Preparation and implementation of the Local Implementation Plan forms an important element of the Division's responsibilities.

Specific responsibilities:

(a) Transport Policy and Planning: This Group is responsible for the development of an integrated transport strategy for the Borough to reflect national and regional guidance, in particular the London Mayor's strategies, as well as appropriate sub-regional and local socio-economic and physical environment. Within this framework, a number of local strategies are prepared related to parking, freight movement, public transport, sustainable travel, town centres etc.

(b) Traffic Management & Road Safety: Designing and implementing various types of traffic management and road safety measures in the Borough. This includes local safety schemes, School Travel Plan schemes, waiting and loading restrictions, controlled parking zones, footway parking, disabled persons' parking bays and adaptations to footways for people with disabilities, minor highway improvements and pedestrian crossings, facilities for cyclists, bus priority measures, improved interchange and temporary traffic arrangements;

(c) Development: advice on the highway implications of development proposals, as well as the engineering contributions to many of the Council's corporate projects. Advice on development proposals is provided in a dual role, as a technical consultant to the Local Planning Authority and as a statutory consultee on behalf of the Local Highway Authority.

Equality issues considered

11. The main stakeholders/beneficiaries of the services involve all sections of the community and makes no discrimination, directly or indirectly. However, particular care is taken to safeguard the interest of the vulnerable groups, including those with mobility impairment and those from an economically deprived background. In this regard, there are policies and programmes to improve transport provision to overcome social exclusion.

12. During the process of the implementation of the LIP over the period 2010/11 to 2013/14, a review will be conducted of the relevant service areas' (a) practice, policy and procedures, (b) service provision and delivery, and (c) staffing, with a view to ensuring adherence to the EIA guidance.

13. In terms of the LIP objectives and delivery actions explained in Chapters 3 and 4, it is the Council's clear intention to achieve a transport system in the Borough that ensures social inclusion. This is demonstrated in Table A.1.1 related to the screening of impacts. Bexley's anxiety to improve the operation of the Borough's public transport facilities includes the need for accessible transport to assist the vulnerable groups of the community.

14. Regular consultation is carried out with the Bexley Access Group, Bexley Association for Disabled People (BADP); Town Centre partnerships, the Chambers of Commerce, the Metropolitan Police and the business focus groups. In addition, scheme-specific consultation is conducted with those affected by any proposed scheme such as controlled parking zone or traffic management measures. Consultation with staff is undertaken for the implementation of the Staff Travel Plan. The transport policies included in the Council's LDF Core Strategy were subject to extensive consultation and included an examination in public. The Consultation of the LIP was consulted upon with key stakeholders and specifically interest groups for people with disabilities.

15. There are no evidence-based data sources that can be reviewed to identify whether there are any adverse impacts of the Division's policies and services on different equality groups. There has been no need so far to commission any relevant research to determine any differential impact of the Division's policies and functions. No complaints have been received implying differential treatment in the delivery of the Division's services.

² Following a re-structuring since this impact assessment, the functions of the T&T Division have been re-organised within the Strategic Planning and Transportation Services and Engineering Services Divisions. The EIA considerations explained in this appendix also apply to these two service areas.

16. Bexley is anxious that it has the best staff available regardless of their ethnicity, social orientation or disability. Recruitment of the Division's staff is also monitored including the ethnicity and disability of applicants, the number who are shortlisted and the number subsequently appointed. The Central Personnel Unit, in line with Corporate and Departmental requirements, undertakes ethnic and disability monitoring of personnel data. The results are reported to senior management regularly to ensure that the policies are being fully implemented. Ethnic monitoring of the service users currently features in the normal monitoring activities of all service areas. For example, on the implementation of road safety engineering measures, surveys are conducted to assess the impacts on all sections of the community, with particular reference to the vulnerable road users, residents of the economically deprived areas and other equality target groups of the Borough. The Road Safety Consultative Committee receives frequent reports monitoring progress on the programmes of work and their impacts on the community.

17. The contract for the Division's external contractors Parsons Brinckerhoff includes clauses on equal opportunities and equality issues. Monitoring is conducted through the regular performance review exercises.

Mitigation of adverse impact

18. The EQIA carried in each service area includes an action plan for mitigation measures. Previous reviews have resulted in improvements to the language information on leaflets, translators available at some exhibitions and improved recruitment monitoring. Selection of sites for schemes in most work areas is based on pre-published criteria such as accident rate and road surface condition. However, in other work programmes like area treatments, factors such as the degree of social deprivation are included in the criteria for selecting schemes. These schemes are coordinated with the Council's area of opportunity programme, which is targeted for reducing social exclusion.

Training

19. It is recognised that diversity training of staff is essential to fulfilling the obligations of the Equality Impact Assessment. Although there is no corporate position on how race is addressed within the practice and delivery of the Transport and Traffic Services of the Council, training helps staff to integrate this issue into work practice. All managers of the Division receive appropriate training in equality issues.

Screening of Impact Assessment

Background

20. The current context of the Borough in terms of social, economic and physical factors is described in Chapters 1 and 2. This includes the distribution of the Equality Target Groups (ETG) in Bexley. The Black and Minority Ethnic (BME) population is expected to grow from 12.1% in 2001 to around 17.2% by 2023. North Bexley, and in particular Thamesmead has experienced significant change with a substantial increase in the Black ethnic grouping, evidenced from school census and children centres registrations. In terms of accessibility and mobility in general, according to the Local Futures Audit, Bexley is one of the most accessible and connected areas in the country, ranked 61st out of 408 districts in Great Britain. However, within Greater London, the Borough is not as accessible and links with neighbouring boroughs are seen to be particularly poor. The map showing the Public Transport Accessibility Levels (Fig. 2.7) indicates that most parts of the Borough have relatively low level of accessibility by public transport.

21. Easy access to quality services is one of the key aims of the Council, as set out in the Community Strategy. In particular, this relates to the quality of the services that the Council itself provides. Good local amenities are another objective, including quality of accessible historic, arts, recreational and entertainment facilities.

22. Bexley's LIP objectives include a specific reference to the transport needs of the ETG. The consultation carried out on the Draft LIP also provided some feedback from all sections of the community including the ETG.

23. In Chapter 4 of this document, the Council's LIP Proposals are enumerated. These include several proposals that have various positive impacts on the ETG, such as the enhancement of the personal security of women, reduction of child casualties, better accessibility for the vulnerable groups including the older and disabled people and public realm improvements in deprived parts of the Borough.

24. In the light of the above, a screening form on impact assessment issued by TfL has been completed and is presented in Table A.1.2.

Impact of Bexley's transport policies proposals

25. As demonstrated in Table A.I.I, the Council's transport strategy and all associated policies described in Chapter 3 of the LIP have positive impact on the ETG. Most of Bexley's LIP delivery actions described in Chapter 4 also have positive impacts, with some exceptions. School travel plans and parking control around schools may not be of interest to mothers who would normally prefer to drive their children to school. These measures, however, have positive impacts on those who do not have the use of a car, e.g. some BME and youth and children, while being neutral to the other categories of ETG. When road capacity is constrained, bus priority measures may cause inconvenience to drivers and ethnic minority shop owners, although this could be considered beneficial in some circumstances, particularly to BME groups who are disproportionate users of buses. Measures to improve walking have neutral impacts on the gay, lesbian and people from different faith, but have distinctly positive impact on pedestrians amongst ETG in general. Although cycling measures have similar impacts, these can also have positive impacts on older people who are fit enough to cycle or those who do not have access to a car or public transport. Bus accessibility and station access measures (e.g. at Crayford station) are specifically aimed to assist the mobility impaired.

26. The transport schemes are distributed throughout the Borough, including the most deprived parts this being a result of identification through other priorities, such as road casualty reduction. All schemes are checked for impact on the ETG (e.g. in Sidcup) and new facilities must be compliant to the Disability Discrimination Act. As mentioned earlier, in identifying and finalising proposals for infrastructure, consultation is carried out with all sections of the community including the ETG. These consultations offer a translation service and have in the past, included on-street interpreters where response levels were low due to likely comprehension difficulties. However, in reviewing the progress of the LIP, it may be necessary to examine more closely how clusters of ETG have benefited from the measures implemented and if any opportunity has been missed.

Conclusion

27. The Council shares the Mayor of London's commitment to provide an inclusive transport system for all Borough residents and visitors. This is also reflected in the service aims of the former Transport and Traffic Services Division and its restructured service areas. There is an established practice of Equality Impact Assessment in service delivery that was closely examined in the former Best Value Review of these services and in a Scrutiny Review of Transport Accessibility in the Borough carried out in 2005. The consultation procedure allowed the ETG to offer their views on the various transport schemes described in the LIP. These schemes indicate identified generic benefits to the ETG including specific benefits to particular categories in this group. Table A.I.I clearly demonstrate that all the LIP objectives and the vast majority of measures have positive impacts for all groups. While some schemes have neutral impacts to some members of the ETG, no serious negative impacts resulting from the LIP policies and proposals have been discerned.



Table A.1.1: Assessment of Impacts of LIP Policies and Proposals

LIP Policy or Proposal	Equality Target Groups								COMMENT
	Women	Black and minority ethnic groups	Children and youth	Older people	People with disabilities	Lesbian, gay etc	People from different faith groups		
Bexley's key transport objectives (listed in Chapter 3)									
Work towards an improved transport systems that support regeneration and economic development in the Borough	Positive (P)	P	P	P	P	P	P	P	High positive impacts on the deprived areas of the Borough.
Support growth needs in the Borough's spatial development strategy	P	P	P	P	P	P	P	P	The impact, although generally positive to all groups including ETG, is not discerned specifically to the ETG.
Secure a more comprehensive, high-quality and integrated public transport system to overcome the current constraints	P	P	P	P	P	P	P	P	High positive impact on the segments of the ETG who do not have access to a private car.
Maximise benefits of regional transport developments to fully utilise funded investment for improving the Borough's connectivity	P	P	P	P	P	P	P	P	The impact, although generally positive to all groups including ETG, is not discerned specifically to the ETG.
Optimise the efficiency of the existing transport networks and improve and maintain the existing transport infrastructure	P	P	P	P	P	P	P	P	Improved footway condition will have high positive impact on vulnerable pedestrians including the mobility impaired.
Support residents and businesses in choosing sustainable modes of travel	P	P	P	P	P	P	P	P	High positive impact on the segments of the ETG who do not have access to a private car
Promote the safety and security of road and transport users	P	P	P	P	P	P	P	P	High positive impacts for the older people and women, particularly when travelling at night.
Improve and enhance access to jobs, services, health & leisure facilities	P	P	P	P	P	P	P	P	High positive impacts for all segments of the ETG, particularly, the youth as well as the old and the infirm.
Make transport system accessible to all with a view to improving social inclusion	P	P	P	P	P	P	P	P	High positive impacts for all segments of the ETG, particularly, the youth as well as the old and the infirm
Reduce the Borough's carbon footprint from transport to address the issue of climate change	P	P	P	P	P	P	P	P	High positive impact on the environment for all, particularly for the health of children and people with respiratory problems.

P= Positive; N= Negative; Ne= Neutral

LIP Delivery Proposal (Programme of Investment)	Equality Target Groups								COMMENT
	Women	Black and minority ethnic groups (BME)	Children and youth	Older people	People with disabilities	Lesbian, gay etc	People from different faith groups		
Local Safety Schemes	Positive (P)	P	P	P	P	P	P	P	Elderly and disabled drivers sometimes perceive some measures such as traffic calming through road humps as undesirable, but their overall impact on community safety outweighs this perception.
Town centre renewal	P to Neutral (Ne)	P	P	P	P	Ne	Ne	Ne	
School Travel Plans	Ne to Negative	P to Ne	P	Ne	Ne	Ne	Ne	Ne	Parents keen to drive their children to school may consider walking and cycling to be risky. However, people without the use of a car benefit and the environment for the whole community is rendered more pleasant.
Integrated transport package including local accessibility improvement	P	P to N	P	P	P	Ne	Ne	Ne	If any of these measures affect road capacity, this may cause inconvenience to drivers and ethnic minority shop owners.
Traffic signal removal and relieving congestion	P	P	P	P	P	Ne	Ne	Ne	Whilst this will remove clutter and improve traffic flow, some pedestrians (particularly the old and the children) may feel insecure in crossing roads.
Travel awareness and travel plans	P	P	P	P	P	Ne	Ne	P	
Improving walking facilities	P	P	P	P	Ne	Ne	Ne	Ne	
Improving cycling facilities	P	P	P	P to Ne	Ne	Ne	Ne	Ne	
Signage programme	P	P	P	P	P	Ne	Ne	Ne	
Improving public transport facilities	P	P	P	P	P	P	P	P	
Bringing transport infrastructure to a state of good repair	P	P	P	P	P	P	P	P	
Environmental monitoring	P	P	P	P	P	P	P	P	

P= Positive; N= Negative; Ne= Neutral

Equality Impact Assessment form

Please note the term 'policy' refers to strategy, policy, projects and function.

Section one: screening

Name of strategy, project or policy: Local Implementation Plan, London Borough of Bexley

Officer completing assessment:

Richard Hawkins, Head of Service
Telephone: 020 8308 7900

1. What is the main purpose of the strategy/project/policy?

The LIP is a statutory document required to be produced by the Borough in accordance with the GLA Act 1999. It is primarily meant to implement the Mayor of London's Transport Strategy at the local level. It will also provide a strategic framework for the Council's transport policies and contain Bexley's transport initiatives and proposals to address local transport issues through the delivery of the Mayor's Transport Strategy.

2. List the main activities of the project/policy (for strategies list the main policy areas):

These relate to the ten LIP transport objectives indicated earlier:

- Secure improved transport systems that support regeneration and economic development
- Support growth needs
- Secure a more comprehensive, high-quality and integrated public transport system
- Maximise benefits of regional transport developments
- Optimise and maintain the efficiency of the existing transport networks
- Facilitate choice of sustainable modes of travel
- Promote the safety and security of road and transport users
- Improve and enhance access to jobs, services, health & leisure facilities
- Make transport system accessible to all
- Reduce the Borough's carbon footprint from transport

Plus, measures to achieve these objectives as described in Chapter 4 (Delivery Plan).

The Boroughs' transport strategy and policies are described in Chapter 3.

3. Have you consulted on this policy?

A full consultation process with all the relevant stakeholders was undertaken on the Draft LIP and the results of this consultation considered in formulating the Final LIP document. Internal consultation with Council Members and Management Board and informal consultation with some neighbouring boroughs have also been conducted.

4. Have you explained your policy to people who might be affected by it directly or indirectly?

The Council's policy development has been the subject of extensive consultation. In addition to the statutory requirements for the LDF Core Strategy, there have been consultation on town centre revitalisation schemes. Schemes that form part of the LIP proposals are also regularly explained to the beneficiaries.

5. Who will be the main beneficiaries of the strategy/project/policy?

Residents, visitors and those travelling through the Borough (including the ETG) will benefit from the policies and proposals described in the LIP. This matches the overall aim of Bexley's Sustainable Community Strategy to improve the quality of life for all associated with the Borough.

Please complete the table below and give reasons/ comments

(Full details are also given in Table A.1.1 earlier)

Table A.1.2: Main beneficiaries and impacts

Equality Target Group	Positive Impact – it could benefit		Negative impact - it could disadvantage		Reason/ Comment
	High	Low	High	Low or nil	
Equal opportunities/ or improved relations					
Gender					
Women	x			x	
Men	x			x	
Race					
Asian or Asian British People	x			x	
Black or Black British People	x			x	
Chinese people and other people	x			x	
People of mixed race	x			x	
White people (including Irish people)	x			x	
Disabled people	x			x	
Lesbians, gay men and bisexuals	x			x	
Transgender people	x			x	
Age					
Older people (60+)	x			x	
Younger people (17- 25) and children	x			x	
Faith Groups	x			x	

5b. What action(s) need to be taken to the strategy, project or policy, which could mitigate low adverse impact or encourage positive impact? Explain how:

As explained in paragraph 20 earlier, the EQIA carried in each service area includes an action plan for mitigation measures. Previous reviews have resulted in improvements to the language information on leaflets, translators available at some exhibitions and improved recruitment monitoring. Selection of sites for schemes in most work areas is based on pre-published criteria such as accident rate and road surface condition. However, in other work programmes like area treatments, factors such as the degree of social deprivation are included in the criteria for selecting schemes. These schemes are coordinated with the Council's area of opportunity programme, which is targeted for reducing social exclusion.

6. What equality monitoring systems have been set up to carry out regular checks on the effects your policy has on:

a. racial groups

b. other equality target groups

Ethnic monitoring of the service users currently features in the normal monitoring activities of all service areas. For example, on the implementation of road safety engineering measures, surveys are conducted to assess the impacts on all sections of the community, with particular reference to the vulnerable road users, residents of the economically deprived areas and other equality target groups of the Borough.

7. How will you introduce the policy including any necessary training? Does everyone involved in the policy know and understand what you have done? Are they able to put the policy into practice?

Many of the policies described in the LIP are based on the Council's statutory Unitary Development Plan and LDF Draft Core Strategy, which have already gone through a process of consultation and implementation. The staff of the Transport and Traffic Services have already been exposed to the introduction/ implementation of proposals under the previous LIP and its implementation in accordance with the MTS policies and proposals. As regards training, all managers of the Division receive appropriate training in equality issues .

8. How do we measure the success of the policy and functions and what are your performance indicators?

These are fully explained in Chapter 5 of the document.

Date of completion: 26 November
2010 (reviewed in April 2011)

Form completed by: Richard Hawkins,
Head of Transport & Traffic Services

Appendix 2 Strategic Environmental Assessment Statement

Prepared by:

Wardell Armstrong

Environment & Sustainability Consultants
Stoke-on-Trent

1. Introduction

Context of this SEA Statement

1.1 This SEA Statement outlines the Strategic Environmental Assessment (SEA) for the second Local Implementation Plan (LIP) of the London Borough of Bexley. London Boroughs are required to produce Local Implementation Plans (LIPs), to implement the Mayor of London's Transport Strategy in accordance with Section 145 of the Greater London Authority Act 1999.

1.2 Plans requiring SEA are set out in the Environmental Assessment of Plans and Programmes Regulations 2004 (the SEA Regulations). SEA is mandatory for plans falling under (c) of the SEA regulations where:

(c) The plan is for agriculture, forestry, fisheries, energy, industry, transport, waste management, water management, telecommunications, tourism, town and country planning, or land use; and it 'sets the framework' for future development consents listed in the 1985 EIA Directive (85/337/EEC). (WA emphasis)

1.3 This SEA Statement accompanies the Local Implementation Plan for Bexley (LIP) to show how environmental considerations have been taken into account in the development of the LIP, what impacts are predicted and how they will be monitored. The production of the SEA Statement acts as an important check on the LIP and on the SEA process. It helps to ensure that the environment has been considered at every stage, and the information collected has influenced the final shape of the LIP.

1.4 SEA Regulations 16.3c) (iii) and 16.4 require that a statement be made available to accompany the plan. This statement must contain the following information: -

- How environmental considerations have been integrated into the LIP;
- How the environmental report has been taken into account;
- How consultation responses have been taken into account;
- Reasons for choosing the LIP as adopted, in the light of other reasonable alternatives dealt with;

- Measures that are to be taken to monitor the significant environmental effects of the implementation of the LIP.

1.5 The requirement to include details in the SEA statement of the monitoring measures draws attention to the need to monitor the significant effects, both beneficial and adverse, of the LIP.

1.6 The Environmental Report provides an inventory of environmental, social and economic issues in the Borough. The role of the SEA Statement is to demonstrate the action taken by the Borough during the development of the SEA and LIP, to protect and enhance the environment. This SEA Statement does therefore not need to replicate all the information included in the Environmental Report.

1.7 The SEA process and regulations do not prescribe that the final LIP must incorporate the best environmental option. However, the SEA provides the decision-maker with evidence and information upon which to make a decision.

Study Team

1.8 The Study Team involved in the preparation of Bexley's Final Local Implementation Plan and its SEA comprised the following:

- The London Borough of Bexley's Strategic Planning and Transportation Services;
- Choudhury Lichfield & Associates (CLA): Consultants for the formulation of the Local Implementation Plan;
- Wardell Armstrong LLP (WA): Consultants for undertaking the Strategic Environmental Assessment.

1.9 WA have led the preparation of this SEA Statement with input and assistance from CLA and the London Borough of Bexley.

2. Strategic Environmental Assessment (SEA) and the Regulations

2.1 Strategic Environmental Assessment (SEA) is a process to ensure that significant environmental effects that can arise from plans and programmes are identified, assessed, mitigated, communicated to decision makers and monitored. It also ensures that opportunities for consultation with the public are provided.

2.2 SEA is now considered to be an important tool in public planning and policy making. Particular benefits include:

- Supporting sustainable development.
- Improving the evidence base for strategic decisions.
- Facilitating, and responding to, consultation with stakeholders.
- Streamlining other processes, such as the Environmental Impact Assessment of individual development projects.

2.3 A Strategic Environmental Assessment of transport plans and programmes in England is required in accordance with the European Union Directive 2001/42/EC on "the assessment of the effects of certain plans and programmes on the development". The Directive has been transposed into UK law via the Environmental Assessment of Plans and Programmes Regulations 2004 (SI 2004 No. 1633), known as the SEA Regulations.

2.4 Within the SEA Regulations, Regulation 16.3(iii) and 16.4 require that a 'statement' be made available to accompany the completed plan.

The SEA Process

2.5 The LIP is intended to be set within the framework of the Mayor of London's Transport Strategy (MTS). However in accordance with the LIP guidance (May 2010) issued by the Greater London Authority

and Transport for London (TfL), the focus is on the first three years, 2011/12 to 2013/14, although where the MTS addresses longer-term plans and proposals the longer timescale is considered.

2.6 The SEA Guidance sets out the SEA process as comprising the following key stages:

- Stage A Setting context and objectives and establishing baseline.
- Stage B Developing and refining alternatives and deciding on the scope of SEA.
- Stage C Appraising the effects of the plan.
- Stage D Consulting on the draft plan and Environmental Report.
- Stage E Monitoring implementation of the Plan.

2.7 At the time of issuing the draft SEA Statement Stages A and B had been completed and Stage C (appraising the effects of the plan) was being completed.

2.8 A Scoping Report (the output of Stage B) was issued to statutory environmental bodies in October 2010. Results from these consultations were received and the issues were taken into consideration during the production of the draft Environmental Report.

2.9 The draft Environmental Report was issued to statutory environmental bodies in December 2010 for consultation however no further responses have been received. This SEA Statement will summarise the final report specifically addressing Stages D and E of this process.

2.10 Table I sets out the documents produced during the SEA process. The information within these documents is not replicated here, as it is the aim of this statement to show how the final LIP will take into account the findings of the SEA.

Table A.2.1: Documents Produced

Document	Date	Access to Document	Purpose
SEA Scoping Report	October 2010	London Borough of Bexley	Identify the issues and options and consultation on the issues and options.
Draft Environmental Report	December 2010	London Borough of Bexley	To assess the effects of the plan, consider alternatives and propose mitigation and monitoring. Consultation
Final Environmental Report	June 2011	London Borough of Bexley	An updated report which takes into account the consultation
Final SEA Statement	June 2011	London Borough of Bexley	To show how environmental considerations have been taken into account in the development of the LIP

3. The SEA Process

How the SEA process has influenced the LIP

3.1 A number of internal discussions on the SEA/LIP were held within the Study Team to ensure that the developing SEA influenced the production of the LIP.

3.2 On the 18th November 2010 a meeting between Wardell Armstrong, Choudhury Lichfield and Associates and Bexley Council's Strategic Planning (Sustainability Appraisal) Team was held to discuss the progress of the SEA/LIP. The meeting sought to clarify the approach to dealing with LIP alternatives; review the consultee responses received, and to discuss the structure of the SEA Environmental Report and Statement. The draft Environmental Report was subsequently issued for consultation in December 2010.

3.3 Following the consultation period a further meeting between Wardell Armstrong, Choudhury Lichfield and Associates and the London Borough of Bexley's Sustainability Appraisal Officer was held on the 26th May 2011 to discuss proposed alterations to the SEA of the LIP.

3.4 The London Borough of Bexley's LIP has few significant adverse effects due to the nature of the LIP, which is constrained by the requirements of the Council, the Mayor of London's Transport Strategy and the responsibilities of other bodies for large scale infrastructure works. The elected Members will also have been consulted prior to the development of the LIP about the strategic direction they wished transport policies to take. These influences on the LIP mean that the LIP policy options will generally produce or actively seek to bring about environmental improvement.

3.5 No significant changes have been required to be made to the London Borough of Bexley's programmes and proposals in the LIP due to the findings of the SEA. However, the SEA process has been helpful in considering the programmes and proposals in the LIP from a wider environmental perspective. It has resulted in additional focus and detailed evaluation of the Borough's policies.

4. Consultation

4.1 Following the production of the Scoping Report, consultation was undertaken with the three statutory consultees; Natural England, English Heritage and the Environment Agency. Broadly positive responses were received from Natural England and the Environment Agency, however no responses were provided by English Heritage. A summary of the responses which have been incorporated into the Environmental Report are given below.

4.2 The overall approach, methodology and objectives are acceptable to Natural England and have been broadly supported. Natural England commented that they would expect to see the following elements included within the SEA baseline information:

- Landscape (and townscape) character and quality with reference to the London Landscape Framework
- Biodiversity and geodiversity including BAP species and habitats and the location of Special Protection Areas (SPAs), Special Areas of Conservation (SACs) and Sites of Special Scientific Interest (SSSIs).
- Access including the Thames Path national trail (where relevant), permissive access and Public Rights of Way.
- The natural environment resource of the area including green spaces and links between them.

4.3 In addition Natural England also expect SEA objectives to cover the following issues:-

- Conserve and enhance landscape and townscape character and quality; and local distinctiveness;
- Conserve and enhance biodiversity, including both habitat and species;
- Conserve and enhance geodiversity and soils;
- Provide and enhance opportunities for public access to a good quality rights of way and open space.

4.4 The Environment Agency did not provide any specific feedback on the London Borough of Bexley's Scoping Report, but provided a checklist of issues that it considered should be included in all Local Transport Plans and associated SEAs. The issues highlighted in the EA checklist such as Climate Change have been incorporated into the final Environmental report.

5. Assessment of the LIP and an alternative option

5.1 The SEA Statement must identify the alternatives considered for achieving the LIP objectives and priorities. If these are then assessed, the effects of each can be taken into account so that the potential adverse effects of the plan can be avoided and beneficial aspects identified and enhanced.

5.2 The SEA regulations require reasonable alternatives to the preferred option for achieving the LIP objectives to be assessed. They highlight that the SEA Statement must state "the reasons for choosing the plan or programme as adopted; in light of the other reasonable alternatives dealt with....." Article 16(4).

5.3 Alternatives should be limited to those that are realistic and achievable. The choice of alternative plans

is constrained by the Mayor's Transport Strategy which sets out key priorities. A 'Do Nothing' alternative has not been considered as a realistic alternative as it will not result in the LIP achieving the key priorities of the MTS.

5.4 The London Borough of Bexley will use a mix of measures for achieving the LIP and MTS goals. The Borough's LIP transport objectives are required to be consistent with its corporate strategies and policies as well as the MTS goals. Issues which have been considered include:

- Funding availability.
- Need for sustainable transport system.
- Need for economic regeneration.
- Other local circumstances.

5.5 In order to provide an alternative to the LIP, schemes have been reordered to focus on short term low cost measures which are easily implementable. Strategic Schemes under this alternative were given a low priority. This results in a different distribution of impacts.

5.6 Set out below is an examination of the likely significant environmental, social and economic effects of implementing the alternative compared with the LIP. This is presented as a discussion of the effect of the alternative on each SEA topic.

Impacts of the alternative LIP (emphasis on cost effective short term measures without a strategic overview) compared with the LIP

Landscape/Townscape and Visual

Indicator:

- Avoid negative impacts on townscape and landscape character

5.7 An alternative LIP with a low priority of strategic schemes could generate more adverse impacts compared with the LIP. Without a strategic overview the local schemes to improve road safety could have negative impacts on townscape character, if the schemes include surface treatments such as coloured tints or stripes that are unsympathetic to the surroundings. Safety schemes can contribute to urban clutter due to pedestrian crossings and lighting.

5.8 The local installation of dropped kerbs and tactile paving could have a negative effect on the streetscape.

Biodiversity and Ecology

Indicators:

- Avoid negative impacts on condition of SSSI's
- Avoid negative impacts on BAP habitats and species

5.9 The alternative LIP would have no more impacts upon SSSI's within the Borough than the LIP. There would also be a minimal difference in impacts resulting from local schemes on BAP species and habitats, as most would be located in urban areas and not adjacent to important habitats.

Archaeology and Cultural Heritage

Indicator:

- Avoid negative impacts on conservation areas

5.10 Under the alternative LIP there is more potential for negative impacts upon the setting of cultural heritage assets, principally Conservation Areas, through the implementation of local transport improvement schemes. To avoid detrimental impacts, sympathetic materials would need to be employed on traffic calming measures and care would need to be taken in the selection and placement of street furniture and signage to avoid visual clutter, detrimental congestion of historically sensitive areas and the insensitive placement of services such as junction boxes or railings.

Noise

Indicators:

- Reduce levels of ambient noise associated with transportation noise
- Reduce level of public dissatisfaction regarding transportation noise

5.11 Under the alternative LIP the emphasis on the implementation of local schemes to improve road safety could lead to an increase in audible noise. The local measures could include road bumps, speed cushions, mini roundabouts and traffic lights that could reduce speeds, which would reduce noise generated by traffic. However, the resulting acceleration and deceleration either side of the speed measures should be taken into account. A complicating factor is that physical speed control measures can result in drivers seeking an alternative route, which can result in increased noise levels elsewhere on the road network.

5.12 The schemes under the alternative LIP could include those to improve walking routes and encourage cycling. This may increase the number of people that walk and cycle and therefore reduce the number of car journeys. However this is considered to be of negligible effect compared with the LIP.

5.13 During road and bridge maintenance works, noise levels are likely to increase for a short period. It is possible that the works will involve a temporary reduction in traffic speed, with possible congestion if temporary traffic lights or lane/bridge closures are proposed. However, it is considered that there would be short term adverse impacts on ambient noise and public dissatisfaction associated with transportation noise.

Air Quality and Climate Change

Indicators:

- Reduction in emissions of air pollutants from road vehicles
- Reduction in area of AQMA designation

5.14 Local schemes to improve road safety could reduce the average speed of vehicles. However, traffic stopping would produce increased vehicle emissions during braking and accelerating with possible congestion at peak times.

5.15 An increased level of maintenance or survey work under the alternative LIP option could lead to the flow of traffic being affected due to congestion caused by speed restrictions, temporary traffic lights or lane closures. A reduction in speed will cause an increase in nitrogen oxides, carbon dioxide, particulates and hydrocarbons.

5.16 In addition focussing on bridge strengthening works in a short timescale may result in some temporary weight restrictions being lifted and therefore some changes in localised HGV movements which may have a short term effect on particulate levels on route diversions.

Hydrology and Hydrogeology

Indicator:

- Improvement in water quality

5.17 A focus on road construction and maintenance could potentially increase the concentration of sediment, nutrients, oils and grease and heavy metals. There is a risk of such surface run off entering into watercourses, adversely effecting water quality. However, road improvement and maintenance schemes also provide an opportunity for improved runoff and spillage control. Additionally, enhanced drainage systems may help reduced the risk of flooding.

5.18 It is considered that water quality may be more likely to be adversely affected under the alternative LIP compared with the LIP.

Waste

Indicator:

- Decrease the amount of waste transported by road

5.19 No discernable difference in the impacts on the management or transportation of waste is envisaged due to the implementation of the alternative LIP compared with the LIP.

Access to service, social and economic opportunities

Indicators:

- Reduction in travel time for specific routes
- Increase public transport reliability
- Increase frequency of public transport
- Increase coverage of public transport

5.20 There is little distinction in the impacts between alternative LIP option and the LIP except that maintenance of roads has greater potential to cause temporary disruption to accessibility.

Health

Indicators:

- Reduce air pollution
- Reduce noise pollution
- Increase % of trips by walking and cycling

5.21 Under the alternative LIP cost effective short term schemes, including walking, cycling and safety schemes will tend to encourage healthier transport modes. However this could be offset by the potential increases in emissions and noise outlined above.

Safety

Indicator:

- Reduce accident rates (per 1,000 population)

5.22 The alternative LIP's emphasis on cost effective short term schemes include many local safety schemes with positive impacts for accident reduction.

Social Inclusion

Indicators:

- Increase number & scale of transport initiatives focused on deprived areas & groups
- Increase in provision of facilities for disadvantaged people

5.23 Most cost effective short term aspects of the alternative LIP are neutral with some positive impacts in respect to social inclusion of deprived areas and groups. However these would be less likely to be significant than those positive effects generated by the strategic schemes within the LIP.

Indicator:

- Depend on the nature of impacts identified.

5.24 The differences between the alternative and LIPs are difficult to quantify as they will depend on the nature of impacts.

Employment, Competitiveness and Regeneration**Indicators:**

- Reduction in unit cost for travel for residents, work/business travel and freight transport
- Increase reliability, accessibility & convenience of public transport to major employment areas
- Reduce journey times within & out of borough for residents' work/business travel and freight
- Improvement to specific locally targeted problems (e.g. town centre congestion)

5.25 The focus of the alternative LIP on cost effective short term aspects are less likely to generate positive impacts compared with the LIP, with respect to employment, competitiveness and regeneration.

Reasons for Choosing the More Strategic Approach of the LIP

5.26 The assessment of the cost effective short term alternative without a strategic overview compared with the mixture of cost effective short term and strategic schemes set out in the LIP, has identified a number of minor differences. Cost effective short term measures without a strategic overview, could have greater negative impact on townscape. This is due to schemes to improve road safety and also those which include surface treatments that are unsympathetic to the surroundings having an adverse visual impact. The use of local safety measures, such as road bumps and mini roundabouts, could also lead to an increase in audible noise and emissions over the LIP option.

5.27 Similarly the social and economic impacts of a focus on short term local measures are less likely to deliver positive benefits than the LIP.

5.28 The LIP mix of schemes generally prevents or reduces negative environmental impacts, whilst contributing to the delivery of the identified goals of the MTS.

6. Monitoring Requirements

6.1 The SEA directive explicitly requires monitoring of the significant environmental effects of the plan:

'Member States shall monitor the significant environmental effects of the implementation of plans. ... In order, inter alia, to identify at an early stage unforeseen adverse effects, and to be able to undertake appropriate remedial action' (Article 10.1)

'The Environmental Report should provide information on 'a description of the measures envisaged concerning monitoring' (Annex I (i))

6.2 Effective monitoring can contribute to managing uncertainty, improving knowledge, enhancing transparency and accountability and managing environmental information.

6.3 SEA monitoring will involve measuring trends in indicators. This will enable the link between implementation of the plan and programme and the likely significant effects to be established and monitored.

6.4 Table 2 shows the SEA topics, the indicators and suggestions for the future monitoring undertaken at Stage E of the SEA process. The extent of such monitoring will be agreed between the London Borough of Bexley and the relevant agencies.

Table A.2.2: Suggestions for Monitoring

SEA Objective	Indicator	Monitoring activity to be undertaken	Who is responsible for undertaking the monitoring
Effective Protection of the Environment/ prudent use of natural resources			
1. To reduce air pollution (including greenhouse gases) and ensure air quality continues to improve.	Reduction in emissions of air pollutants from road transport. Reduction in population living in an existing AQMA..	AQ monitoring. Monitor the area of AQMA designation.	London Borough of Bexley London Borough of Bexley
2. Reduce noise generated by vehicle use and control the level of transport noise impacts on sensitive locations.	Reduce levels of ambient noise associated with transport. Reduce level of public dissatisfaction regarding transportation noise.	Continue to monitor ambient noise levels in the Borough. Monitor complaints regarding transportation noise and/ or undertake surveys of public dissatisfaction.	London Borough of Bexley London Borough of Bexley
3. To reduce road traffic and congestion through reducing the need to travel by car and improving travel choices.	Reduction in proportion of people travelling by car. Reduce road traffic volumes. Increase access and frequency of public transport.	Monitor screenline flows and modal split. Traffic counts and journey time surveys	London Borough of Bexley London Borough of Bexley I
4. Maintain and where possible enhance the quality of the Borough's built and natural environment	Avoid negative impacts on condition of SSSIs Avoid negative impacts on BAP habitats and species	Monitor condition of designated sites including SSSIs Monitor number of BAP species. (repeated counts)	Natural England London Borough of Bexley Natural England
5. Safe Guard the Council's UDP policies on the quality, attractiveness and protection of the Borough's environment	Avoid negative impacts on conservation areas Avoid negative impacts on townscape and landscape character Improvement of water quality Avoid Flood Risk	Monitor condition of conservation areas Continue to monitor the condition of water bodies in the Borough	London Borough of Bexley Environment Agency
6. Promote sustainable transport of waste	Increase the amount of waste transported by rail and water.	Monitor levels of waste transport on roads, rail and water	London Borough of Bexley

Table A.2.2: Suggestions for Monitoring continued

SEA Objective	Indicator	Monitoring activity to be undertaken	Who is responsible for undertaking the monitoring
Social Progress Which Recognises the Needs of Everyone			
7. To improve the health and safety of the Borough residents	Reduce accident rates (per 1,000 population)	Monitor progress on national and mayoral targets for 2010 for road casualties	London Borough of Bexley
	Reduce % of persons with air pollution related disease	AQ monitoring	London Borough of Bexley
	Reduce % of persons with noise pollution related disease	Noise monitoring	London Borough of Bexley
	Increase % of trips by walking and cycling	Monitor screenline flows and modal split	London Borough of Bexley
8. Access to services, social and economic opportunities	Reduction in travel time per distance travelled	Monitor travel time by public transport and car on selected routes	London Borough of Bexley
	Increase public transport reliability	Monitor bus reliability against timetables	
	Increase frequency of public transport	Monitor bus frequency	
	Increase coverage of public transport	Monitor coverage of bus routes	
9. Social inclusion	Increase number & scale of transport initiatives focused on deprived areas & groups	Monitor schemes in areas scoring poorly in the IMD 2004	London Borough of Bexley
	Increase in provision of facilities for disadvantaged people	Monitor number of schemes/ facilities for people with disabilities	London Borough of Bexley
10. Localised community impacts	Depend on the nature of impacts identified.	Monitor selected problems or situations	London Borough of Bexley
Maintenance of High and Stable Economic Growth and Employment			
11. To support employment, economic competitiveness and regeneration in the Borough	Reduction in unit cost for travel for residents, work/ business travel and freight transport	Monitor unit cost of public transport	London Borough of Bexley, Transport for London
	Increase reliability, accessibility & convenience of public transport to major employment areas	Monitor bus reliability, accessibility & convenience on selected routes	London Borough of Bexley, Transport for London
	Reduce journey times within & out of borough for residents' work/business travel and freight	Monitor journey times for residents' work/business travel and freight	London Borough of Bexley, Transport for London
	Improvement to specific locally targeted problems (e.g. town centre congestion)	Monitor selected local problems	London Borough of Bexley, Transport for London

Appendix 3 Abbreviations

ABS:	Area- Based Scheme	LoBEG:	London Bridges Engineering Group
AQMA:	Air Quality Management Area	LoTAG:	London Technical Advisers' Group
BATS:	Bexley Accessible Transport Scheme	LTCC:	London Traffic Control Centre
BEA:	Belvedere Employment Area	LTDS:	London Travel Demand Study
BME:	Black and Minority Ethnic Group	MPA:	Metropolitan Police Authority
BRAG:	Bexley Road Safety Action Group	MTS:	Mayor's Transport Strategy
BVPI:	Best Value Performance Indicator	NI:	National Indicator
CCTV:	Close Circuit Television	ODPM:	Office of the Deputy Prime Minister
CPZ:	Controlled Parking Zone	PFI:	Private Finance Initiative
CRISP:	Cycle Route Improvement and Stakeholder Plan	PI:	Performance Indicator
DCLG:	Department for Communities and Local Government	PPG:	Planning Policy Guidance
DDA:	Disability Discrimination Act	PPS:	Planning Policy Statement
DEFRA:	Department for Environment, Food & Rural Affairs	PSA:	Public Service Agreement
DfT:	Department for Transport	PTAL:	Public Transport Accessibility Level
DLR:	Docklands Light Railway	RPG:	Regional Planning Guidance
ERDF:	European Regional Development Fund	SEA:	Strategic Environmental Assessment
ESRT:	East Sub-regional Transport	SELTRANS:	South East London Transport Strategy
ETG:	Equality Target Group	SRN:	Strategic Road Network
EQIA:	Equality Impact Assessment	SRTP:	Sub-Regional Transport Plan
FQP:	Freight Quality Partnership	STDR:	South Thames Development Route
GLA:	Greater London Authority	STP:	School Travel Plan
GWT:	Greenwich Waterfront Transit	TfL:	Transport for London
HAMP:	Highway Asset Management Plan	TGB:	Thames Gateway Bridge
HCA:	Home and Communities Agency	TGLP:	Thames Gateway London Partnership
HGV:	Heavy Goods Vehicle	TLRN:	Transport for London Road Network
IMD:	Index of Multiple Deprivation	TOC:	Train Operating Company
KSI:	Killed or Seriously Injured	UDC:	Urban Development Corporation
LAA:	Local Area Agreement	UDP:	Unitary Development Plan
LATS:	London Area Transport Survey	UKPMS:	National Pavement Management System
LBPN:	London Bus Priority Network		
LCN:	London Cycle Network		
LEA:	Local Economic Assessment		
LDA:	London Development Agency		
LDF:	Local Development Framework		
LEZ:	Low Emission Zone		
LIP:	Local Implementation Plan		

Appendix 4 Glossary

Accessibility: In general terms, this refers to the ease with which people can gain access to employment, services, amenities and goods, either through close proximity or through the provision of transport links and facilities. Accessibility of the transport system refers to the extent of barriers to movement for users who may experience problems getting from one place to another, including disabled people.

Air Quality Management Areas: These are areas, designated by local authorities (in London, the boroughs), where air quality is projected to exceed limits set out in the Air Quality (England) Regulations 2000. Following the designation of an Air Quality Management Area a local authority is required to complete a further assessment and prepare an action plan aimed at improvement of air quality in the area.

Biking Borough: The Biking Boroughs scheme initiated by the Mayor of London in 2010 aims to harness the potential for cycling in Outer London, making it even easier to replace unnecessary short car trips with pedal power and delivering health benefits, better air quality and encouraging the use of local shops and town centres. Bexley has been identified as one of the first ten biking boroughs.

Biodiversity: The diversity or variety, of plants, animals and other living things, in a particular area or region. It encompasses habitat diversity, species diversity and genetic diversity. Biodiversity has value in its own right and has social and economic value for human society.

Car Sharing Schemes: such as Liftshare, city car clubs and car pools, facilitate vehicle sharing.

Congestion Charging: Applying charges to reduce the number of vehicles and level of congestion in congested areas. The first major scheme in this regard is the Central London Congestion Charging introduced by the then Mayor in February 2003 in a specified area.

Crossrail: A proposed east-west, cross London rail link to provide a direct fast service between the City and Heathrow Airport and serve some major regeneration corridors, as well as improve access to large areas of inner and outer London. One of the lines of this system (Crossrail 1) will serve Abbey Wood possibly by 2019.

Equality Impact Assessment: The purpose of an Equality Impact Assessment is to ensure an organisation's strategies, policies and projects do not discriminate and that, where possible, it promotes equality. It focuses on assessing and recording the likely equalities impact on certain groups of people known as equality target groups. It involves anticipating the consequences of policies and projects on these groups and making sure that, as far as possible, any negative consequences are eliminated or minimised and opportunities for promoting equality are maximised.

Freight Quality Partnerships: Partnerships between business and local authorities to develop an understanding of distribution issues and problems at the local level and to promote constructive solutions that reconcile the need for access for goods and services with local environmental and social concerns.

Greater London Authority (GLA): This authority was established in 2000 under the GLA Act 1999. It covers the area of 33 London boroughs, including the Corporation of London. It is made up of a directly elected executive Mayor and a separately elected Assembly, which primarily exercises scrutiny functions. The GLA is a new kind of local authority, designed to provide citywide strategic government for London.

Local Development Framework: The Local Development Framework will be the successor to the Unitary Development Plan (UDP). As the strategic and local planning framework for the Borough, it will comprise a Core Strategy and a series of Local Development Documents and Supplementary Planning Documents as specified in the Local Development Scheme (LDS) produced and updated annually.

London Bus Priority Network (LBPV): A 860km bus network covering the main bus routes in which bus priority and other traffic management measures are introduced to improve reliability and reduce overall journey times.

London Cycle Network (LCN+): An initiative aimed at improving cycle access to key destinations and increasing cycle safety, including a network of designated cycle routes.

London Development Agency: One of nine Regional Development Agencies set up by the previous government covering England and a functional body of the Greater London Authority. Its aim has been to further the economic development and regeneration of Greater London. The future of this agency is being reviewed..

London Plan: In accordance with the requirements of the GLA Act 1999, the Mayor of London published his Spatial Development Strategy in February 2004, called the London Plan. It is a strategic plan setting out an integrated social, economic and environmental framework for the future development of London, looking forward 15 to 20 years. It replaces the Regional Planning Guidance and the unitary development plans and Local Development Frameworks of the London boroughs must be in 'general conformity' with it. A draft replacement London Plan was published in October 2009..

Mayor's Transport Strategy: First published in July 2001 by the Greater London Authority, the Mayor of London's Transport Strategy sets the policy framework for transport in London over a long-term time horizon. Its integrated policies and proposals cover all means of transport and the management of the Capital's

road system. It sets the Mayor's high-level goals and provides the context for the more detailed plans of the various implementation agencies, in particular the London boroughs and Transport for London. The current Mayor's new Transport Strategy was published in May 2010 and covers the period up to 2031.

Opportunity Areas: Areas designated in the Mayor's London Plan as having opportunities for accommodating large scale development to provide substantial numbers of new employment and housing, each typically more than 5,000 jobs and/or 2,500 homes, with a mixed and intensive use of land and assisted by good public transport accessibility. Bexley Riverside, Thamesmead and Abbey Wood are among the 33 Opportunity Areas designated.

Public Transport Accessibility (PTAL): The extent and ease of access by public transport, or, where it can reasonably be used as a proxy, as the degree of access to the public transport network.

Public Realm: This is the space between and within buildings that are publicly accessible, including streets, squares, forecourts, parks and open spaces.

Road Hierarchy: A separation of the road network into different categories determined by the functions they perform, identifying priorities for their use.

Section 106 Agreements: Planning obligations, associated with planned development, on persons with an interest in land in order to achieve the implementation of relevant planning policies as authorised by Section 106 of the Town and Country Planning Act 1990 as amended by the Planning and Compensation Act 1991 and the Planning and Compulsory Purchase Act 2004.

Social Inclusion: The ability to access and benefit from the full range of opportunities available to members of society. It aims to remove barriers for people or for areas that experience a combination of linked problems such as unemployment, poor skills, low income, poor housing, high crime environments, bad health and family breakdown.

Strategic Road Network (SRN): In accordance with sections 60-63 of the Traffic Management Act 2004, the Government has designated a new 'strategic road' network for London. This is intended to give additional powers to the Mayor and Transport for London to work with the London Boroughs to minimize the disruption caused by roadworks. In Bexley, this constitutes the A2016, A206, A2000, and A223.

Sustainable Development: A widely used international definition of this term is 'development which meets the needs of the present without compromising the ability of future generations to meet their own needs' (from Our Common Future: The Brundtland Report, 1987)

Thames Gateway: This area comprises a corridor of land on either side of the River Thames extending from east London through to north Kent and south Essex. The

London part of the area extends eastwards from Deptford Creek and the Royal Docks and includes parts of lower end of the Lee Valley around Stratford. It includes parts of the boroughs of Barking & Dagenham, Bexley, Greenwich, Havering, Lewisham, Newham and Tower Hamlets as well as limited parts of Hackney and Waltham Forest.

Thameslink: A new National Rail cross-London link building on the existing Farringdon-Blackfriars line.

Traffic Calming: Self-enforcing measures that are designed to encourage driving at speeds appropriate to local conditions. Traffic calming schemes can improve the environment and reduce accidents.

Train Operating Companies: Private companies which operate the train services on the National Rail network under franchise from DfT. Southeastern Railway is the company that currently operates the trains in Bexley.

Transport Assessment: Assessments of the transport impact of developments above a certain threshold. For major proposals, assessments should illustrate the following: accessibility to the site by all modes; the likely modal split of journeys to and from the site; and proposed measures to improve access by public transport, walking and cycling.

Transport for London: A functional body of the Greater London Authority, accountable to the Mayor for implementing his Transport Strategy, with responsibility for the operation of buses, the Docklands Light Railway, Croydon Tramlink, and the Underground, the London Overground and for regulating taxis and private hire vehicles, and operation of the Transport for London Road Network.

Transport for London Road Network: Comprises 550km of London's red routes and other important streets. This network is also called the Greater London Authority Road Network in the GLA Act 1999.

Unitary Development Plan (UDP): Statutory plans produced by each borough that provide a strategic and local planning policy framework for guiding future development and land use change in the borough's area. The UDP will progressively be replaced by the Local Development Framework.



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